

SEQUENCE LISTING

<110> THE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE
 GERMINO, Gregory
 WATNICK, Terry
 PHAKDEEKITCHAROEN, Bunyong

<120> DETECTION AND TREATMENT OF POLYCYSTIC KIDNEY DISEASE

<130> JHU1680-2

<150> US 60/283,691

<151> 2001-07-13

<150> US 60/218,261

<151> 2000-07-13

<160> 113

<170> PatentIn version 3.0

<210> 1

<211> 53522

<212> DNA

<213> Homo sapiens

<400> 1

tgtaaacttt ttgagacagc atctcaccct gttccccagg ctggagtgca gtggtgtgat	60
catggctcac tgcagcgtca acctcctggg tctacttgat ctgtaaactt cgaggggaagg	120
tgtaataaac cctcctgcaa tgtctttgtt tttcaaaatc tttgtatttc acagttagc	180
ttcgtggggt gatgttctat tttgtttttg tgtgtgtgtg tgtgtgtttt gtgttttttt	240
ttgagacaca gtcttgctct tgttgcccag gctggagtgc aatgggtgtga tcttggtc	300
ctgcaacttc cacctcttgg gttcaagaga ttctcctgcc tcagccttcc gagtagctag	360
gattacaggc gccgccacca caccgcta attttgtatt tttagtagag atgggggttc	420
tccatattgg tcaggctggt ctcaaactcc cgacctcagg tgatccgccc acctcagcct	480
cccaaatgc tgggattaca ggcgtgagtc accgcacctg gccaatgttc tatttttgag	540
aacacaacag ttcataatat attctacata gaccatacct gttatgtgta gataaacaga	600
ctcttttccc atttaacacc ttttgctta ggtttatttt tctggtatca atactggcac	660
acttactttg tttgcagttt cctgtctttt tttttttttt tttttttttt gagacagagt	720
ctcactctgt caccagggt ggagtgaagt ggcgggatct cggctcactg caacctctac	780
ctcctggggt catgcgattc tcctgcctca gcttcccgaa tagctgagac cacaactgtg	840
tgccaccatg ccagccaat ttttgtattt ttagtagaca cgggggtttca ccatactggc	900
caggatggct caatctcttg acctcgtgat ccacctgcct ccgcctccca aagtgctggg	960
attacaggca tgagccactg tgctggcct ttttttttct ttttgagatg gagtctcact	1020
ctgtcaccca ggctggagtg cagtggggta acctcaggtc actgcgacct ccgcctcccg	1080

0904968-0101

ggttccagtg attctcctgc ctcagcctcc cgagtagctg ggattacagg caccaccac 1140
 catgcctggc taatttttgt attttttagta gagacggggg tttgccacgt tggccagggt 1200
 ggtctcgaac tcttggcctc atgtgacccg cctgccttgg cctcccaaag tgctgggatt 1260
 acaggtgtga gccactgtgc ctggcctggc tttcttgttt cttttctcct cttctagttt 1320
 ccccttttta ggctaacaat tattcactgt taataaaaac cctcaggtct gtattttatc 1380
 aagaaacatt tccctcacgt cttcttcct gaaccaaaca agatctctgg cacattttat 1440
 ttgctctgtc tcaccacatg gattttgttt ttttgtttct ttgttttttg agatggagtc 1500
 tcactcttgt tgcccaggct ggagtgccat ggcacaatct cagctcactg caacctccac 1560
 ctctggggtt caagcgattc tcctgtctca gcctcctgag tagctgggat tacaggcgcg 1620
 tggcaccacc cccagctaata ttttgatttt ttagtagaga cggggtttca ccatgttggt 1680
 caggctggtc tcgaactcct gaccttgtga tctgccacc ttggcctccc aaagtgctgg 1740
 gattacaggc atgagccacc acgcccggcc cccatggttt ttcaaatagt ttagaatttc 1800
 atttccagggt aactaatttg cttcttttaa catatgtctt ttctatttaa gaaatccttt 1860
 ctaaacaatt gcattttatt ccacaaccgc cttcaaaca tcattgagac ttggttaatc 1920
 tgttttgctc atttggcagc agtttcttgt ggctgtttct tccctccact ggagtccttg 1980
 aatcttaagt ctgtcatttg actgcaatta aaagctgggt ttggaataca atcgcagcct 2040
 taccatccac ctgctgtgtg acctggtaaa tttctttttt tttttttgag acggagtctt 2100
 gctctgttgc ccaggctgga gtgcagtggc acaacctctg cctcccagggt tcaagcgatt 2160
 ctactgcctc aggtcccta gtagctggga ttataggtgc ctgccaccat gccagctga 2220
 tttttgtatt tttagtagag atgaggtttc accatgttgg ctaggctggg ctcgaacttc 2280
 tgatcttgtg atctgcccgc ctggcctcc caaagtgctg ggattacagg catgagccac 2340
 cactcccagc cagttctttt tttctttttt ccattttttt ttttttcgag acaggatctt 2400
 actcttttgc ccaggcgga gtgcagtggc acaatcacgg ctcagcgcag ccactgccta 2460
 ctgggctcac acgtccctcc ggcctcagcc tctcgagtac ctgggactac aagcgtgagc 2520
 cagtttggct aattttggct aatttttgta gaaacggggg ctcgccatgt tggccaggct 2580
 ggtctccaac tcctggactc aagggatcca cttcctccc cctctcaaag ttctgggatt 2640
 accggagtga gccactgtgc cctgctggca aatttcttaa actgtctgtg cctcagtga 2700
 ctcatttaat aaaggaata attgtagcac actttttcta gagctgtgaa gattcaatgg 2760
 aataaataag gcaataaatg aatggatggg gaatgaagga tgtggggttc ctccctcttg 2820
 tttttcaata agctctcacc atcaacctcc cattgcctgt tctctctctt cccctctct 2880

090496 0740
 104720 3954060

ccctctgtct ctctctcagc caggaaacct ggggtaggga ggcttggagc cagcgggtgc 2940
 gtcgggagggc tgcgggtact gactcggggc gcgcacggag atcgcgggag aaggatccac 3000
 aaccgcggaa gaaggatcag ggtggagcct gtggctgctg caggaggagg aaccgcggc 3060
 ctggcccaca ccacaggaga agggcggagc agatggcacc ctgcccaccg cttcccggcc 3120
 acgcacttta gcctgcagcg gggcggagcg tgaaaaatag ctcgtgctcc tcggccgact 3180
 ctgcagtgcg acggcgggtgc ttccagacgc tccgccccac gtcgcatgcg ccccgggaac 3240
 gcgtggggcg gagcttccgg agggccccgc ctgctgccga ccctgtggag cggagggtga 3300
 agcctccgga tgccagtccc tcatcgctgg cccggtcgcg ctgtggcgaa gggggcggag 3360
 cctgcacccg ccccgccccc cctcgccccg tccgccccgc gccgcgcggg gaggaggagg 3420
 aggagccgcg gcggggcccc cactgcagcg ccagcgtccg agcgggcggc cgagctcccg 3480
 gagcggcctg gccccgagcc ccgagcgggc gtcgctcagc agcaggtcgc ggccgcagcc 3540
 ccatccagcc cgcgccccgc atgccgtccg cgggccccgc ctgagctgcg gcctccgcgc 3600
 gcgggcgggc ctggggacgg cggggccatg cgcgcgctgc cctaacgatg ccgcccggcg 3660
 cgcccggccg cctggcgctg gccctgggccc tgggctgtg gctcggggcg ctggcggggg 3720
 gccccgggcg cggctgcggg ccctgcgagc cccctgcct ctgcggccca gcgcccggcg 3780
 ccgcctgccg cgtcaactgc tcgggcccgc ggctgcggac gctcgggtccc gcgctgcgca 3840
 tccccgcgga cgcacacagc ctgtgagtag cgggcccagc ggcacccggg agaggccgcg 3900
 ggacgggcgg gcgtgggcgg gttccctggc ccgggacggg aagcaggacg cgggccagga 3960
 cgctcccagg ggcgaggctc cggcgcggca cggcggggccc tgctaaataa ggaacgcctg 4020
 gagccgcggt tggcacggcc ccggggagcc gaaaaacccc gggctctggag acagacgtcc 4080
 caccgggggg ctctgcagac gccagcgggg gcggggcgcg gaggccgcgc tcagctggga 4140
 ggacaaacag tcgctaattg gagaggaatt gggatgcggc ctggggctgc ggggtacccg 4200
 gagaggtggg gatggctgta gggggcggca gggaagagtt ccaggaggtg tctggaaaag 4260
 gatttgatgg atgtgcaaga attgggctga tgcttaggaa ggggcgatga ggtgggtcca 4320
 gaagaagggg ggtgaacggt gtgagcaaag accgtgaggc tggaggctgg ccacgggagg 4380
 tgtgaggggt aggggcaggg tgggaggtgg gctcgcgggt gggctgggggt catgaagggc 4440
 ctcaggcgct ctgctattgg gttccaaggc taccctgaga acaggggtga ggggggattg 4500
 ccgtgggggg ttaaagcctt gtcatgttcg ctttcgggag ataaaaacaa caggtggcct 4560
 ttatggagac gctgcccaga gccaggtctg tgccaggctc ctgttggggg tcgtcatgcg 4620
 gaatcctgac tctgaccatc cgaggcatag ggaccgtgga gatttgcatt tcacagatga 4680
 ggaaacaggt ttggagaggt gacacgacct gtcccaggca tcacagccgg gatgtgcata 4740

050496.0130

gcagggggttt ggaactatga ggtgcccagg acccaggggtt ggattgaaaa gggcggaggg 4800
gactaagata agcagacagt tgtccccagc gctggggaga gtcttgggac cagtctgatg 4860
ccttgatattt cccaggctcc aggctcctcg ccgggacagt gtctccttgg gtgcgtgctg 4920
gatccctggg ggacgtggca catccccagg cttgctaaac attgggtggg ttctggcatt 4980
tggttttgta acgtttctgg gtcactcccg cctgtggcca cccttcctta ggggagccgt 5040
gtgtccttgg ggctttgctg ggtggtctcg aggggtgggag aagaatgggt tctcctggac 5100
caatggagcc cgtgcccctc ggggccacat tgctcctgcg ctccctgact gcggacgcgt 5160
gtgtctcgcg gctgtctctg tggagatggc ctctcctgct ctggcaacag caccacaga 5220
attgcatcag acctaccca cccgttggtt gtgatgctgt agctgagggc tcctctgtct 5280
gccaggccgg tcaactgggga ctctgtccag ggcctgggtg ttctgcttc ccagcacctg 5340
atggtgtcca tgagagcagc cctcaggag ctgtccggga gagaagggcg ctggtggctg 5400
ctgagcggag agcaaggccc gtgttctcca ggccttggc acagcagtgg agccccgcc 5460
cctgccttgt gttgtcctct taggctctgg tcctgggggtt tggaggaggg ggaccctggg 5520
agttggtggc ctgtcccagc ctgagctggc aagattccga atgccaggcc cccaagtgt 5580
gcaacagggc acagggtgac ctcatgtggg cagggtgggtg ctgttctgta cacacctggg 5640
gccgccgctg ggagagttct ggaaggtggg gtgaggggac ccatggcaaa ctagggcctt 5700
aggaaggatg tgaaggccct ggctggcccc ccaggccacc ctctgtgctg tggggcagcc 5760
cagccatttt gctgtctacc ctgcaaaactc ctctcgggg agacggctgg gttttcccca 5820
gggaagaggg gtcaagctgg gagaggtgaa ggacacagat cacagctgct ggcaggtgtt 5880
caagggtcca agagcgttgc tgtctgggtg tcaccagtag ccttcctggg gggctcacgc 5940
aggtgcctct ccacttgtgg ctccctggct gctgaagctc agcagggaca gctgtgtcca 6000
gttccaggtg gaggacagcc ggggcttctg aggccacagc ctgccttggg ttaatgatgc 6060
tgccgagagg tgggtggcttt tggaaaagat ggcgtactgc aaaacgtgct gctctgcgtg 6120
gctcgaagct tcgtggggag acgtgggcag agccgtggct gactcacaga cccccaccc 6180
cagagcctgc cctgcccctc ctgccccgac ccttctccct cctgacccat gtgttttttt 6240
tttttttttt tttttttgag acagagttca ctcttggtgc caaggctgga gtgcaatggc 6300
acgatctcgg ctcatggcaa cctccgcctc ctgggttcaa gcgctttttc ctgcctcagc 6360
ctcccagata gctgggatta caggcgtgca ccaccatgcc tggctaattt tgtattttta 6420
gtagagacag ggtttctcca tattggtcag gctggtcttg aactcctgac ctcatgatgat 6480
ccgcccgcct cggcctccca aagtgctggg attacaggca tgagccacca cggccagccc 6540

0504960-074304

tgacccatgt	tttgaaccaa	attccagcca	ccctttttatc	tgcaagcatt	ttggagggca	6600
tcgcaatact	gcagacccac	ctaacacaa	agacagttcc	ttcatgccac	cgaaggcctg	6660
gtgtgttcac	atTTTTtggt	taatagtTtg	aattaagagc	caaataaggt	ccacacactg	6720
caattagtTg	atgtctTTTT	TTTTTctTt	TTTTTTTTT	TTTTgagacg	gagtcttgct	6780
cttgtctcca	ggccgcagtg	cagtggcatg	atctcagctc	accgcaacct	ccgactccct	6840
ggttcaagcg	attctcctgc	ctcagcctcc	cgagtacctg	gtagctgggt	ttacaggcat	6900
gcaccaccgt	gcccagctaa	TTTTTgtatt	tttagtagag	acggggTTTT	actgtgttg	6960
ccaggatggT	ctcgatctcc	tgacctcgtg	atctgcccac	ctcggcctcc	caaagtgctg	7020
ggattacagg	cgtgagccac	cgcacccggc	caatgtctTt	taaaaatata	tactTTTTT	7080
TTTTTTTTga	gacggagTtT	cgctcttgTt	gcccaggctg	gagtgcagtg	gcgcgatctc	7140
acctcacggc	aacctccgcc	tcccgggttc	aagtgattct	cctgcctcag	cctctccagt	7200
agctgggatt	acaggcatgt	gccaccatgc	ctggctaatt	ttgtattTtT	aggagagacg	7260
gggtTtctcc	acgttggtca	ggctggTctc	aaactcctga	cctcaggTga	tccgcctgcc	7320
ttggcctccc	aaagtgttg	gattacaggT	gtgagccaac	gcgcccagac	aaaaatatat	7380
gtgtgtctTt	aaggctggTc	aagcaaagca	gtaggactgg	agaaagaatg	aagaattcta	7440
cctggctgtg	atcaattcgt	tgtgaacacc	actgtgcttg	gaccagctag	ctgatgtctt	7500
ttgtTtTgtt	ttgtTtgaga	cggagtctgg	ctctgtcacc	caggctggag	gacaatggTg	7560
tgatctcggc	tactgcagc	ctccatctcc	cgggttcaag	cgattctcct	gcctcagcct	7620
cctgagtagc	tgggattaga	ggcgcgcgcc	accacgccc	gctaattTtT	aaaaatattt	7680
ttagtagaga	tggggTtTca	ccatgtTggT	caggctggTc	ttgaactctt	ggccttaggt	7740
gatctgcttg	cctcggcctc	ccaaagtgct	gggattacag	gtgtgagtga	tgtattTtat	7800
ttatttattt	atttatttat	TTTTattatt	tgagatggag	tctcactctg	ttgcccaggc	7860
tggagtgcag	cagtgccatc	tcagctcact	gcaagctccg	cctcctgggt	tcacgccatt	7920
ctcctgcctc	agcctcctga	gtagcctgga	ctggTgccc	ccaccatgcc	cagctaattt	7980
TTTgtattTt	tagtagagac	ggggTtTcac	cgtgttagcc	aggatggTct	ggatctcctg	8040
acctcgtgat	cctcccgct	cagcctccca	aagtgctggg	attacaggct	tgagccaccg	8100
cctgtctTtT	aaatgtccga	tgatgtctag	gagcttccct	tctctctTtT	ttccttgTgc	8160
aatttgtTga	agaaactggc	tcttgcagcc	tggattTctc	gctgtgtctt	gggggtgcca	8220
cctccatggT	gtcacctccg	tggTgctgtg	agtgtgtgct	ttgtgtTtct	tgtaaattgg	8280
tcgttggagc	cgacatccca	ttgtcccaga	ggtTgtcctg	gctggcactg	gcctaggtgt	8340
agatgtcatc	agctcagggc	ccctgctct	aaaggccact	tctggTgctg	gttgccactc	8400

090498.07101

accctggctg	ggggtcacct	gggtctgctg	ctgtctcgca	aatgctgggg	tccaggactg	8460
ggcacatcga	gggacttggt	aggtgcttgg	ttcactgatg	taaaatatag	gagcaccg	8520
ggccttgccc	tttccacact	gcacccctga	atgacaggag	agtgtgggag	agtgtaggga	8580
cagcaggcgc	agaccccg	gcccctgcct	gggattggcg	tcggggaaga	caggcattct	8640
ggagcgaccc	ctaggcctga	tgccttagag	cgcaactgcc	agagacacag	cttccttggg	8700
gggctggcca	ggccacggag	gggccctggc	tcccatttct	ggtccttggg	tcctgagagc	8760
gaggactagg	gattgtcacc	aaggcctcca	tgagccctca	gcagaaggag	ggccaccctc	8820
gagggctccg	ttatcactgg	agcccgcggt	caaccaacac	gcagatgatt	ctccaaggac	8880
agagatggat	gatggggagg	gggctggcct	ggaaggaccc	ccagtgcagg	tgacattgaa	8940
gccaggtttc	aaagctccca	caggggagctg	cccagagaga	gtccccaagg	ggcaaggtga	9000
ctcgggggca	ggggtagggc	ctctgtcagg	agagccctagg	agaggcctgt	gtcttctagg	9060
aagagccctg	gcagccgagc	ggaggcagtg	gtgaggacct	gcacccctga	tgtccagctg	9120
gcctcaccg	gggtccctga	gccgggtctt	acgtggctcc	cgcactcggg	cggttcagaac	9180
gtgcctgcgt	gagaaacggt	agtttcttta	ttagacgcgg	atgcaaactc	gccaaacttg	9240
tggacaaaaa	tgtggacaag	aagtcacacg	ctcactcctg	tacgcgattg	ccggcagggg	9300
tgggggaagg	gatggggagg	ctttggttgt	gtctgcagca	gttgggaatg	tggggcaccc	9360
gagctcccac	tgcagaggcg	actgtggaga	cagagagcac	ctgcagggtca	tccatgcagt	9420
atcggtctgc	atccagatca	tacagggaac	actatgattc	aacaacagac	agggaccccg	9480
tttaaacaatg	gacaaggggt	cactcacgcc	tggaatccca	gcagtttggg	aggccagggg	9540
gggtggatcg	cttgagccca	ggagtttgac	accagcctgg	gcaacagggg	gagaccccg	9600
tctctaaaaa	ataaaagaac	attggccggg	cgtggtggta	tgcactctgtg	gtcccagcta	9660
ttcaggagac	tgaggtggga	catcacttga	gccgaggagg	tcaaggctgc	agtgagctgt	9720
gatcacacca	ctgcactcca	ggctgggtca	cagagcaaga	ccctgtctca	aaaaaaaaaa	9780
aaaaaaaaaa	aaaaaatcac	aggatctgaa	cagagatttc	tccaaagaag	acgcacagat	9840
ggccaacagc	gtgtgagaag	atggctcgcc	tcattagtca	tgaggggaaac	gtaaatcaaa	9900
accactgtcc	agccgggccc	ggtgcctcac	gcctgtaatc	ccagcacttt	aggagagcag	9960
atggcttgag	gccaggagtt	tgaggccagc	ctgggcaaca	tagcgagacc	aataaataga	10020
tattagtggg	ggcgctgta	gtcccagcta	gttgggaggc	tgagggggga	ggattccctg	10080
agtctatgag	gttgagactg	cagttagctg	tgatgggtgcc	actgcactcc	agcctgggccc	10140
actaggaaac	ggtcttttaa	aaaaaaaaaa	aaaaacaggg	tgggcgcggt	ggttcacgcc	10200

09904953-02101

tgtaatctca	gcactttggg	aggccaaggt	gggggggatca	caaggtcagg	agtttgtgac	10260
cagcctgacc	aacatgggtga	aaccccgttc	tactaaaaat	acaaaaatta	gcgaggtgtg	10320
gtcgtgggcg	cctgtaatcc	cagctaatta	ggaggctgag	gcaggagaaat	cacttgaacc	10380
cgggaggcgg	aggttgcagt	gagccaatat	cacaccactg	cactctagcc	tgggtcaacag	10440
agcgagactc	tgtctcaaaa	aaaaaaaaatg	ctgagcgtgg	tggcgcacgc	ctgtagtctc	10500
agctactttg	ggggctgagg	caggagaatc	gcttgaacct	gggaggcaga	ggtcgcagtg	10560
aggcaagatt	gcaccattgc	actccagcct	gggagacaga	gtgaaactct	gtctcaaaaa	10620
gaaaagggtct	aggaagagtc	cgcaccctct	ccccgcgggtg	gccacgccgg	gctccgcgct	10680
gagccctctg	tgttcttgtc	tctccatacc	tcatcacggc	accgcagggt	tgcagccact	10740
cctgggtctca	ttttacacac	caggaaattg	aggctctttg	agaagccgtg	gtgatgattt	10800
catcagcatg	ctctggggca	gacccttgca	gccgcacagg	gtgcctgggg	cccacactag	10860
tgccctgggt	tatagacaga	cagaggtggc	agtggcgctt	ccgagtcggg	ctgcgatgtg	10920
cttgcactcc	ccgaggggct	gaggggacct	gcgcccagggt	gcagctgctt	gggtgctgcc	10980
agccctccc	acctctccct	ccctgccagc	ccctcccacc	tctccctccc	tgccagcccc	11040
tcccacctct	ccctccctgc	cagccctccc	cacctctccc	tccctgccag	cccctcccac	11100
ctctccctcc	ctgccagccc	ctcccacctc	tccctccctg	ccagccctcc	ccacctctcc	11160
ctccctgcca	gcccctccca	cctctccctc	cctccagccc	ctcccacctc	tccctccctg	11220
ccagccctcc	ccacctctcc	ctccctgcca	gcccctccca	cctctccctc	cctgccagcc	11280
cctcccacct	ctccctccct	gccagccctt	cccacctctc	cctccctgcc	agccctccc	11340
acctctccct	ccctgccagc	ccctcccacc	tctccctccc	tggctcatcc	ctgctgtgtc	11400
ccttctctct	agtttctgtg	tcagtttcag	gaaggaggct	gggaaccacg	atgtagggaa	11460
tttgccacct	ggagtcagac	ctgggttcac	gtcccagcgc	ctccacctct	ggtgtgacct	11520
tgggtccagtc	tctcagcctc	agtttctctc	cctgtaaaagt	gggtccatg	attagatgca	11580
ccctgcaggg	cagtgtagca	gtgacctggc	tcagccactg	gcagccccaa	caatcatacc	11640
ttgttaaagt	agctctgtcg	gttccctcag	gggttccggg	ggccatttcc	cctgtccctcc	11700
atgcactgtg	agacctgccc	tgccacagag	cagagtgtaa	cagcctgagg	gtgagagcca	11760
gacactgtgc	ctgtgcttag	accagacact	ggacgacggg	agccagtgca	gcctgggagg	11820
gtggactcct	atggacctct	cagcaccacg	cctcggtgcc	ttcagcgcag	ggccgcgtgg	11880
ctgtgggggg	tcacaagacc	cggccacctc	ctgcttgtgc	ctacatctgg	gtgtttgccc	11940
attggtgcct	tttgacgcgt	tctggtgtgt	gtgagacgtg	cggggctggg	aagtgttggc	12000
agagccgcga	gtaccgtcct	cactcctttt	gttcttttga	cgtaagctgg	cgagtggcac	12060

0904968-0101

tgcctgagtt	ccgctcagtg	cccgcctga	tgtgcggacc	ccgctgcatt	cttgctgtta	12120
ggtggtggcg	gtgtgcgctg	tcgctggtgg	gcaccgagag	tctttgggag	ctttggggag	12180
gttgtgcaa	gcctgagcct	cgacgtcccc	cttcccggct	ttctgttggc	tcttctgagg	12240
ccagggcatc	tctatgaggg	cctcctgctg	gagccgtctc	tgtggatctc	ctctgccatc	12300
ctggcccatg	agtgggtgat	gcgctggcca	ccatctgggtg	acagtggccg	ggcaccgctg	12360
ccaaatgtgg	gtcccgcata	tgcaagcccc	tccttgggtc	ccctagggta	tgggggtggtt	12420
ctgccactgc	cctcgcctcc	ccaccttggg	gtgcctctcc	ccctgctcgt	gggggagacc	12480
ctgcctggga	tctgctttcc	agcaaggaat	atactttgga	gggagacaca	catgttcttt	12540
tctggagctc	tgcagtggcc	acggcagccc	agcccgcaa	gcaccctgga	atgaaaacat	12600
cccgtgctg	tctgggcctg	gcctgcactc	tgctgcctgc	gctccagctg	gctgaggccg	12660
ggcacgtctg	cgggcacagc	agcggggggcg	ccacagtctc	cctgcagagt	gagcgcagct	12720
ggaaaatgca	gctcacgccc	tttcccagaa	cacctcgctc	ttcatggctt	ggcagctgtc	12780
cttgcctagg	ggccaggggtg	cccaggcact	ggtggcagga	gaagggctac	atctggggct	12840
gaggcgggct	gggtcctttt	ctccctgcag	ctcccgaggc	ccagccctgg	cccagcctgg	12900
cattcctgac	cttagcagcg	ccatgatctg	aagacaggct	ggcttctgtg	aggccacctc	12960
agaaagggct	ttgtgcccag	gcagaggcgg	aagccagctc	ttccttctgg	ttgaggcagg	13020
aatgaggcca	gcgctgggca	agcccatgcc	cagggaacgt	cacagctgtg	ggagtacagg	13080
ggctccgggt	tctgagcccg	tccactgtgc	atcgtggccc	tggcctcagg	atggctcgta	13140
ccatcattgg	ctgtgcccac	agccgagtgg	gtgatgggat	tccggctgcc	ccgctggatc	13200
tgtgctgctg	ccctctccag	ggcactgctg	tgcccgcaca	gccggggcgca	gatggccagt	13260
ttgcttgccc	cccccccccac	catcctcttc	ctaccttggc	ttcctccatt	gacacactgg	13320
accctgctgg	ctgcccggggg	aggtgttttg	gggatggtgt	tgggggagga	ggagggcccc	13380
ttgagcctca	gtgtgcccac	caggagcgta	aggtcagtgc	agcacctgcc	cacacaggct	13440
gtgaaggggtg	ggagtggaga	gggatgcaag	ggggtcacaa	cgcttggctc	catgtcagct	13500
gcgtgcaggg	gcaccaggag	ccggccctca	ttctcccctt	gaactggaag	ggtggccccg	13560
accccagcgg	caggtagcat	acgtatgaag	cgctctcctt	cctacacccc	acaggtgggc	13620
tcgtctccag	acggcccttt	ttgagctggc	tgtgtttttc	catctgtgta	ggcaaggaca	13680
tcgcagactc	ccctttctca	tctccctcgt	tcagcctccg	aggccggagt	ctccatccct	13740
gtgcctgcct	gtgggtccccg	ggaggacctg	aggctgcccc	tgtcaccccc	ggcatctcat	13800
cctgggggaca	gttcagccgt	gggaggggatc	tgtaaggaca	gaatgccgct	gagcctgggg	13860

ctccccagct	agtctcacac	cccgtgtctg	ggacccagag	accctcgtgc	agggctctgt	13920
tgcttggggc	ctggcagcct	cgctctgtat	cagaggctgc	cacccccacc	cctcgtgggg	13980
ccagggttgt	ggccggcctc	cctggccctc	cccatggaag	tggtaggcgg	agccagcagc	14040
catctgcca	gcccggggct	gcactgtttt	ttttcaaagt	agcacctgcc	caaactgcag	14100
cccgtaatt	taaacaggat	catttccggc	cctggaagcc	gcctcactct	ccttaaatag	14160
aaaggagcac	agcgcagagg	gaaacagatg	aggtcatggc	tcggctggcc	cagcgaggaa	14220
ggggccgcag	tggggggtggc	actgccgcct	gtccctgtgc	ctctccagcg	cccacactgc	14280
agcccatctc	ctcaccttgg	gcctgctctc	gggagggacg	ggcctggggg	tcctcttgct	14340
gggcggaggg	gaaccagctc	ctccaggaga	ggacggggcc	tggcaggggg	catggggcct	14400
ccctgggtct	ggcgctctgt	cctgccccctg	ccgagggagg	agcggttaca	taagctccgc	14460
aggcggcccc	tccgagccgg	tccccccagc	ccagtttcca	gtgaggcggc	cagcgcgggc	14520
gggggtgccg	ggcctgggcg	acacccgctg	ctgaccacac	gtgtctggaa	tgtgcagatg	14580
tttctttggg	ggctccgtcc	ggcccccaga	cccactcag	catctggtct	ggggagtggg	14640
cgctgggggc	actcagctct	gagtgtgaga	ctctgaggca	ggtctggttt	gtctggggcc	14700
attccctctg	ctgtggattg	ggagggcccc	gggagctgcc	ccacaccag	ggaagtctc	14760
ctcagtcca	ctgttgcat	ccccgacccc	ggctcccccg	gcccaggagc	gcctgtgggg	14820
cagaaggccc	agccccaaga	cttcccggcc	ctgccagcct	caggcttcac	ccaccctcgc	14880
gccaactgtg	ggcagagccc	aggggggagg	caggagagcc	agcgcctggc	tgggaacacc	14940
cctgaggggc	cgaggctcca	gggcgagggg	gcccgaacctg	gggttcacac	gcccgggtgg	15000
cgggcagacc	cgctgcagca	tgagacacgt	gtcagctacc	tcggggccggc	aggctggccc	15060
tgctgcccac	agccctggga	cgtggcccca	cctgtgacgg	gtgtggaggg	gcagcctcca	15120
ggcctggcca	caccctctgc	tggtgctgct	cctgctccag	gattggcaag	ggtgctggga	15180
aggggtgaag	accgtactg	tggccacaca	cctgggactt	ccttctccac	ccagtgggtgc	15240
cccagcagcc	gctaaggagc	ccgctgggtc	ccacgctagg	atggctcctaa	ctcctcccgc	15300
cttccagatc	ggacgctcgg	cgctggggac	cccttggtgc	ccggggctgg	ggcacctgcc	15360
tgcccccatg	ggggtgtact	cctcccagca	agcttggtct	cagcttcctt	gggagcacat	15420
cctggccctc	gggcacccat	caggctgtcc	ctgtgcacct	ggctcccacc	cttccagctc	15480
atagcaggaa	ctgggggtgag	gagtgcgtgg	ggcagcaagg	gcctgggacc	ccagaggacc	15540
ctgcactctg	ctctgtgctc	ttgcctgggc	ttagggccgc	tcgggtggctc	tgctgccaga	15600
tgcttggggc	ctgctgtgtc	ccccatcctt	gcaggggaacc	agaacgtggg	ggcagggcat	15660
cagacagcgg	cgatgatgtc	acctggcggg	tgacagaggaa	gcccaggggg	cggggtgggg	15720

0950495-024304

gggctggcgc gaggtgcct ggctaggcct tggcgttccc ccagaacggc gatggcaaaa 15780
 gcagatggag acgtgaaaaa gtacgggagc aagcgaggtg aggactccac ggggacccct 15840
 gtgctgttcc ctgtccctga agcccacacc tgagtcctgc ccagggcaga tgcttccaca 15900
 cccagggggc acctgagtc taccagggc agacgcttcc acaccctggg ggctggggga 15960
 ctgcacctgg ctctgtctg ggccccagct tcattccact gccctgggccc ctgggagctc 16020
 ggccgagcgg ggtccccaag accttgctgc atttctgggc cttgggctgg ggtgagggcc 16080
 gggagaagga gccagcctgg agcctggcac gcagggagtg catggccaga accggtgaca 16140
 ggcagggctg cctgctggcg tggaagaagt gtccatggca cccccaggcc tggttcacag 16200
 tgggatgggc ggggagccgg ggggctctgg ggtcctcggc tgacctgccc ccaccctgc 16260
 cctggcttgt cagctcccag cagcagccac tcttgatgga ttttccagaa aatgaggtgt 16320
 ggccaaacat cttcaggctt ttccttcttt cctttctccc gtggcctggg tgggagctgc 16380
 tccccatgcc tgggggcagg tgcgagagcc tgtgccctc cctggggcag tttcacagct 16440
 gtgtcccttc cagggggcct gcctgtgttc accgtggcct ctgcagcacc tctcgccct 16500
 tagggctcct gcgcctcggg tcccggtgcc tcatttctcc ctaaagcatt gggtctgctg 16560
 ccgccgcagc cgctggaaag tccctcctca ggtctaactg cagttcctca cggcacagtg 16620
 ttccccctcg ggcatggtgc ttgggcagtg ggtgtgagtc cagctgcctc accctgtctc 16680
 gagaatggcc tcttgctggt ctcccagcca ccaccctgtc ccaccccacg gcggggatgg 16740
 tgtggatgcc tagcagcgcg gctgtgggcc caccatcct tatgggcagt ggggagcacc 16800
 tcagcccgctg tccctacctt ggtgtagagg aggggacggc agagaagcag gggttcagtta 16860
 ggggggaagt ggtggccctg ccggaggggc cgttccctgt gtgcctggcc cccagatcct 16920
 ctccccctcc ggagcccagg gcacaggcat aggctctctg agtgtccac agccctggg 16980
 ggaagggaac tgcaccccca accgtgccct ccatccgcag atggaacgag aagctccggg 17040
 agccagtgcc cagcgtctca tctgtctggg caccagccc aggtgagggc ctggctccac 17100
 cgtccgtggc tgggtgctgct tcctggcacg gagaaggcct cggctgctct gtccccctcag 17160
 ctgggggtggc ctctggtccc cttctttggt ggttcccttc tcaagctctt gccctggccc 17220
 cgggccccac cgggcagcct gtgtgtgcgt ctctcctgcg ccgggtaggc tcctgtggga 17280
 gcggagctcc ggtgggagga gcagggctgg aggctggcag gggctgggcg ggtgttcagg 17340
 gatggaggcc gccccggctt ggggctggct gccgggtggt cattgctggg aagagcaagt 17400
 ctaggcggag gcacctgctg ggtcactcgt ggggagggtg acacctgggg aagtagaggc 17460
 ccgtggcagg aggtgaggcc tcggggtcct ggggagcagg ggggtggtgt gcagacctgc 17520

0504050
 3364050
 203364050
 203364050

ggagccatag	tcctgtgcca	ggagcactac	tgggagtgcg	tgggaccagg	aggggtgccc	17580
aggggtgggcg	gcagagtgcg	ccccgaggtg	cttgaggccg	aggggaggtg	gagttctcgg	17640
tttgccccag	ctctctgtct	actcacctcc	gcataccagg	ctccaggacc	tggtttgtaa	17700
ctcgggcagc	tctgaaaaga	gagacatgct	gccgccctgt	ggtttctggt	gctttttctt	17760
cactgactac	tgacatggga	tgtttttcct	acggctgtga	ccaattgtgc	ttcttctaata	17820
tgcctgggtt	ttcttttttt	gtttttggag	ttttctcttt	ctttcctccc	tcctctcac	17880
cctccatcct	tttttttttt	atttttatatt	tttgagatgg	agcttcactc	ttgcaggatg	17940
gggtgctgga	gtgcaggggt	gcgatctcag	ctcactgcaa	cctctgcctc	gcgggttcaa	18000
gtgattctcc	tgctaagcc	tcctgagtag	ctggaattac	aggtgcttgc	caccacgccc	18060
gactaattct	gtagttttgg	tagagacagg	gtgtctccgt	gttggtcggg	ctggtcttga	18120
actcctgacc	tcaggtgatg	cgcccgctc	agcctcccaa	agtgcaggga	ttacaggcag	18180
gagccattgc	acccggctct	ttccccctct	ccttttcttc	tctctctcct	ccctttcttt	18240
cttttctttt	cttttttttt	tcttttgaga	tggagtctcg	ctctgtcacc	aggctggatt	18300
gcagtggcgt	gatcttggct	cactgcaacc	ttcgctccc	gggttcacgt	gattctcctg	18360
cctcagcctc	ctgagtggct	ggcactacag	gctcccgcg	ccatgcccg	ctaatttttg	18420
catttttagt	agagacaggg	tttcaccctg	ttggccagga	tggctcgcg	ctcttgatct	18480
catgatccac	ccacctggc	ctcccaaagt	tctggcatta	caggagtgcg	ccaccgtgcc	18540
cggccatctt	tctttccttg	ctttctcttt	gttttctttc	gagaccgggt	cttgctctgt	18600
cgcccaggct	ggactgcagt	ggcacaatca	tagctcactg	cagcctcgac	ttccctggct	18660
caagcgatcc	ttcctcctca	gccccccgag	tagctggaac	tacagttaca	cactaccatg	18720
cctggctgat	tctttttttc	cttgtagaga	tggggctctg	ctatgctgtc	catcctgggc	18780
tcaaactcct	ggccttccca	aagcactggg	tttacaggca	taagccacca	caccagttt	18840
ccttttcttc	tttttaactg	gaatagttga	cgttttcttt	attagctgtg	tgtcaggagg	18900
gtatttttgg	ccttttagtat	gtcgtgtaag	ttgctagtgc	ttttctgaga	ttgtagtttg	18960
ttttctaatt	ttatttatat	tttgcgtaga	agttgtgtat	tttagatgga	gttaggtcgg	19020
ctgggtctttg	atgttttatt	tattaattat	gtatgtatct	atttatcttt	gaggtagagt	19080
ctcgccgttt	caccaggtct	ggagtacagt	gatgcgatct	cagctccctg	tagccttgac	19140
ctctctgggc	tcaagtgatt	tttctctcct	ctacctccc	agtacttggg	acccagggc	19200
catgccgcca	tgcttggtta	atgtgtatct	tttgtagata	cggggctctca	ctgtgttgcc	19260
caggggtggtt	tcaaaatcct	gggcccaggc	gatccttccg	tctcagctcc	cacgggtgctg	19320
tgttaccggc	gtgtgcccag	tgcttgccg	tcttgagggt	cttgtttctc	tgggtttatg	19380

05904938-07304

cctcgaggtg	gcgcctgctc	ccctgtgctc	cctggtagcc	tggtagttag	cctgcttctc	19440
acacagtcac	acctgggtgt	ggccccacag	tgggaccacc	ctgttgggtt	cagaacagga	19500
gatggggggc	cctcgagtct	gtgtgggggc	tgtggacagg	gttgggagac	cttggctctg	19560
tgggggactg	tggacagggg	atgggggggc	ttggccctgc	gtgggatggg	ttgggggtcc	19620
gtgcccttcc	tggccctggg	tggacaggtc	catgtggcac	tcggcatagg	gctgagatgg	19680
gtgcagaggg	ctgaggcccc	caggcctctc	ctggcttggt	ttccccagat	gagtgttcat	19740
ttgggtcttc	catcagaaag	tccccctctg	acctctggga	gtggggagct	caagggtggg	19800
aggccatagc	ttgggggatgc	tggcaatgtg	tgggatgggc	ccagggaagg	cctctggcct	19860
actaggggct	ctggccctga	cccacggcca	ctcactctc	agagacgtct	cccacaacct	19920
gctccggggc	ctggacgttg	ggctcctggc	gaacctctcg	gcgctggcag	agctgtgagt	19980
gtccccagct	cgtgccagca	tgcggggctc	actccgggtg	ggctggcggc	accgcctctt	20040
gctgctcagc	tgtgggggct	tccatcagct	ttgccgaatc	ccccgtctct	tccagggata	20100
taagcaacaa	caagatttct	acgttagaag	aaggaatatt	tgctaattta	tttaatttaa	20160
gtgaaatgta	agttgtgggt	ctttgggtgg	ggctcctggc	ggaccccagg	cccccaatat	20220
cccttctgcc	ctcccagttg	gtccgtgtcc	ccttccaggc	ttgagaccag	atcctggggg	20280
cagttcactg	cctgcttggg	gccccccagt	gccggcttgg	ttggggcagg	ggaggcggtg	20340
ctgtcagggg	ggctccaggg	cctgggttgc	agtggggggc	tggcatagac	ccttcccacc	20400
agacctggtc	cccaacacct	gcccctgccc	tgcagaaacc	tgagtgggaa	cccgtttgag	20460
tgtgactgtg	gcctggcgtg	gctgccgcga	tgggcggagg	agcagcaggt	gcgggtgggt	20520
cagcccgagg	cagccacgtg	tgctgggcct	ggctccctgg	ctggccagcc	tctgcttggc	20580
atccccctgc	tggacagtgg	ctgtgggtgag	tgccgggtggg	tggggccagc	tctgtccttc	20640
ccagccaggt	gggacctggg	ccctgcagac	actgggcagg	gctcaggaag	gcctctctgg	20700
ggggggcctc	cgggccaagg	gaacagcatg	ggagcctgtg	agtgcggcgg	gcggatgtgg	20760
gggcgtgggg	tggagccagg	aggagcagaa	cccgggggtcc	agtggctgcc	tcttctaggt	20820
gaggagtatg	tcgcctgcct	ccctgacaac	agctcaggca	ccgtggcagc	agtgtccttt	20880
tcagctgccc	acgaaggcct	gcttcagcca	gaggcctgca	gcgccttctg	cttctccacc	20940
ggccaggggc	tcgcagccct	ctcggagcag	ggctgggtgcc	tgtgtggggc	ggcccagccc	21000
tccagtgcct	cctttgectg	cctgtccttc	tgctccggcc	ccccgccacc	tctgcccccc	21060
acctgtaggg	gccccacct	cctccagcac	gtcttccctg	cctccccagg	ggccaccctg	21120
gtggggcccc	acggacctct	ggcctctggc	cagctagcag	ccttccacat	cgctgccccg	21180

0590466-071301

ctccctgtca	ctgccacacg	ctgggacttc	ggagacggct	ccgccgaggt	ggatgccgct	21240
gggccggctg	cctcgcatcg	ctatgtgctg	cctggggcgct	atcacgtgac	ggccgtgctg	21300
gccctggggg	ccggctcagc	cctgctgggg	acagacgtgc	aggtggaagc	ggcacctgcc	21360
gccctggagc	tcgtgtgccc	gtcctcgggtg	cagagtgcgc	agagcctcga	cctcagcatc	21420
cagaaccgcg	gtgggttcagg	cctggaggcc	gcctacagca	tcgtggccct	gggcgaggag	21480
ccggccccgag	gtgagtgtct	gctgcccact	ccccttcctc	cccagggcca	tccagatggg	21540
gcagagcctg	gtacccccgt	cttggggcca	cactgaccgt	tgacaccctc	gttcccaccg	21600
gtctccagcg	gtgcacccgc	tctgcccctc	ggacacggag	atcttccttg	gcaacgggca	21660
ctgctaccgc	ctgggtggtg	agaaggcggc	ctggctgcag	gcgcaggagc	agtgtcaggc	21720
ctggggccggg	gccgccctgg	caatggtgga	cagtcccgcc	gtgcagcgct	tcctggtctc	21780
ccgggtcacc	aggtgcctgc	ccccaccccc	cgagggggcca	taggttggga	gatctctgaa	21840
gcactggggc	agagactgcg	gctggggagt	ctcaggagga	aggaggtggg	agctgggccg	21900
gccctggtga	gcaggtggcg	ccggccggtg	gggccgttcc	tgtcagctct	gcagatgcag	21960
aggtggacat	gagctggggg	cagcctccgg	acactcctgg	gcacgccata	cgggaggtgg	22020
cctgcacggg	gatccctgcc	ggtacccaca	ggccccgtgg	gtgggtgctg	ctgtgagcct	22080
gggctggtgg	gccctggtct	ccgggctctg	agcctcagtt	tccccatctg	gaaaggggga	22140
cagtgatggg	gctcccagcg	ggctgctgtg	agggtgggag	gatggaggag	tgccctgagc	22200
cccctgccat	cccacacccg	cccccaggag	cctagacgtg	tggatcggct	tctcgactgt	22260
gcaggggggtg	gaggtggggc	cagcgccgca	gggcgaggcc	ttcagcctgg	agagctgcca	22320
gaactggctg	cccggggagc	cacacccagc	cacagccgag	cactgcgtcc	ggctcggggc	22380
caccgggtgg	tgtaacaccg	acctgtgctc	agcgccgcac	agctacgtct	gcgagctgca	22440
gcccggaggt	gtgcgggggg	ccaggcaggg	gcctgagacg	ctggctgtgg	ttaggggcct	22500
gccgagcgcc	cgcggtggag	cctgggctga	ggaggagggg	ctgggtggggg	ggttttcggg	22560
cggtcgggtc	cccagtcctgt	tcgtcctggt	gtcctggggc	ctggcccggc	gcctcactgt	22620
gcactcgcca	ccccaggccc	agtgcaggat	gccgagaacc	tcctcgtggg	agcgcccagt	22680
ggggacctgc	agggaccctt	gacgcctctg	gcacagcagg	acggcctctc	agccccgcac	22740
gagcccgtgg	aggtagtcgg	ccccccacgt	tctacaacct	gccctcctgc	ctgcccctgg	22800
aggccttgcc	tgccctgccc	actgtgggtc	tcgccaaaaa	acttgggggc	cttaatgttg	22860
cttgtgcccc	gtgaagatgg	ttgggaaaat	ccagagtgcg	gagaggaaag	cgtttactca	22920
cattacctcc	aggccttttc	tctgagcgtg	tgtgagttat	tcctgaaagg	caggtcaggg	22980
gtcctgcccc	ccatggacag	tttccaccgg	agtcttcctc	tcgagcgaca	ggagccaggc	23040

09904958-02304

ctgtgggggt	ctgatggctc	gctctccttc	cctccccctct	tcctgggaag	ttcgggtagg	23100
gggagtctgg	gcttcaggct	gggatgggggt	ctgtggagct	gaggcgcccc	cctgcccacc	23160
aggtcatggg	attccccggg	ctgcgtctga	gccgtgaagc	cttcctcacc	acggccgaat	23220
ttgggaccca	ggagctccgg	cggccccgcc	agctgcggct	gcaggtgtac	cggctcctca	23280
gcacagcagg	tgggactctg	ggtgggtggg	ggtgggtggg	gggcgcccga	ggactcgggg	23340
tggcctctct	gagctttcac	gtctgctggg	cctgtggcca	ccagagtggg	tcccagtctt	23400
aggtggacag	agcagggggt	ccagagacac	cagctcattc	caggtgtcct	gggggtggat	23460
tgggtggggc	ctgcctgggg	gccggcctgg	gtcagtcggc	tggccggaga	cggacgcagc	23520
actgggctgg	gagtgcctgc	caggtgggga	gacctgtcct	cacagcaagg	ccaggattgc	23580
tgggtgcagg	agttgggcat	ctctgacggg	ggcctgtggg	caaatcaggg	ccccaacacc	23640
ctccccctct	cacagggacc	ccggagaacg	gcagcgagcc	tgagagcagg	tccccggaca	23700
acaggaccca	gctggccccc	gcgtgcatgc	cagggggacg	ctgggtgccct	ggagccaaca	23760
tctgcttgcc	gctggacgcc	tcctgccacc	cccaggcctg	cgccaatggc	tgcacgtcag	23820
ggccagggct	acccggggcc	ccctatgcgc	tatggagaga	gttcctcttc	tccgttcccg	23880
cggggccccc	cgcgcagtac	tcgggtgtgtg	gccctgacct	gggtctgttc	cctgcattct	23940
ctcaggccac	cttcctgtct	gctgcccagg	gtctgggtct	gtgcaccaga	cacaccacgc	24000
ctgcaggccc	ctcccacgtc	cttgccacct	ctgacctccg	acctctgcag	tgccctcggc	24060
cctctcccag	tgggagaagc	tctcgccctg	gcccttggca	cgagctgtgc	ctcctcttcc	24120
tctctcccag	cacagctgct	ccttcctgtc	tgccagggtct	tggcctgtgt	cctctccccg	24180
tgtgtccccc	ggtctgcaac	tgtcctgcct	gtccttgtca	cgagcactgt	ggggaggctc	24240
cttgagggtgt	ggctgacgaa	gcggggagcc	ctgcgtgtcc	acctcatcc	gtcgtgcggg	24300
ggtccacggg	ccatgaccgt	gaggacgtga	tgcagccctg	cctccctctc	cacaggtcac	24360
cctccacggc	caggatgtcc	tcattgctccc	tgggtgacct	gttggtctgc	agcacgacgc	24420
tggccctggc	gccctcctgc	actgctcgcc	ggctcccggc	cacctgggtc	cccgggcccc	24480
gtacctctcc	gccaacgcct	cgtcattggg	gccccacttg	ccagcccagc	tggagggcac	24540
ttgggcctgc	cctgcctgtg	ccctgcggct	gcttgacagc	acggaacagc	tcaccgtgct	24600
gctgggcttg	aggcccaacc	ctggactgcg	gctgcctggg	cgctatgagg	tccgggcaga	24660
ggtgggcaat	ggcgtgtcca	ggcacaacct	ctcctgcagc	tttgacgtgg	tctccccagt	24720
ggctgggctg	cgggtcatct	acctgcccc	ccgcgacggc	cgcctctacg	tgcccaccaa	24780
cggctcagcc	ttgggtgctcc	aggtggactc	tgggtgccaac	gccacggcca	cggctcgctg	24840

09904968-071304

gcctgggggc	agtgtcagcg	cccgccttga	gaatgtctgc	cctgccctgg	tggccacctt	24900
cgtgcccggc	tgcccctggg	agaccaacga	taccctgttc	tcagtggtag	cactgccgtg	24960
gctcagtgag	ggggagcacg	tggtggacgt	ggtggtggaa	aacagcgcca	gccggggcaa	25020
cctcagcctg	cgggtgacgg	cggaggagcc	catctgtggc	ctccgcgcca	cgcccagccc	25080
cgaggcccgt	gtactgcagg	gagtcctagt	ggtgagtatg	gccgaggctc	caccaccagc	25140
ccccaggcag	gtgcctgcag	acaggggtgct	cacacagggc	gtgaggcctg	gcttcccagt	25200
gagggcagca	gcccagttac	tggggacgtc	ggccccgggc	aggtcctgct	ggctggctcc	25260
tcgggctacc	tggtgggctt	taaattcctg	gaaagtcacg	gctctgacag	tggctccgct	25320
aactcattcc	actgtctcat	ttcacaaaat	gaatttaaaa	ctctgctccc	tgacctcaca	25380
cgagcccccg	tgagtctctc	acgccctctg	ctgtgttctc	gcctggctaa	agcgagtggc	25440
ttttgaggtg	gagtctgaac	ccctgatggg	aaactgcggg	ctgcccgcgg	tgccaccatg	25500
ctgggtacat	gggggacagg	gctgtctcca	tcttgccggg	acctgcctct	tcaccagggg	25560
ccttgggagg	ggccatcaga	aatggcgtga	cctgtgcagc	ctgtcctggg	ttctgtaagc	25620
cagtgtaggt	gcctcccctc	actgctccga	gctctctggg	tgaggagctg	gggcaagagc	25680
gccgggaggg	tctgagaaga	ctcagagaga	ggtggactct	ttgtagctgg	tactaggttt	25740
gctttacaga	tggggaaact	gaggcacaga	gaggttgagg	cattagtagt	actacatggc	25800
tggctggaga	gccggacagt	gagtgtccca	gcccgggctt	ggctcccatg	gcatgcagag	25860
ccccgggcac	ctcctctcct	ctgtgccccg	cgtgggactc	tccagcccga	cgggaggtgt	25920
gtccaggagg	cgacaggcta	agggcagagt	cctccacaga	gcccaggctg	acaccattcc	25980
ccccgcagag	gtacagcccc	gtggtggagg	cgggctcgga	catggtcttc	cgggtggacca	26040
tcaacgacaa	gcagtcctctg	accttccaga	acgtggtctt	caatgtcatt	tatcagagcg	26100
cggcggctct	caagctctca	gtaggtgggc	gggggtgggg	aggggagggg	atggggcggg	26160
gcagggcggg	ggcgggctcc	accttcacct	ctgccttctg	ctctgcttca	tgctgcccga	26220
ggacgctgcc	atggctgtgg	gtgagtggag	ggagggacgc	caatcagggc	caggcctctc	26280
acctgccacc	tgggctcact	gacgcctgtc	cctgcagctg	acggcctcca	accacgtgag	26340
caacgtcacc	gtgaactaca	acgtaaccgt	ggagcggatg	aacaggatgc	agggctctgca	26400
ggtctccaca	gtgccggccg	tgctgtcccc	caatgccacg	ctagcactga	cggcgggctg	26460
gctggtggac	tcggccgtgg	aggtggcctt	cctgtgagtg	actcgggggc	cggtttgggg	26520
tgggcaccag	gctcttgtcc	cagccccagc	ctcagccgag	ggacccccac	atcacggggg	26580
tgcttttctg	agcctcgggt	tccctgtctg	ttgggaggta	actgggtgca	caggagccct	26640
gaggctgcac	gggagccggg	agaggcctca	gcacagccgg	gtggggcctg	aatggaggcc	26700

09904968-02404

cggggcgtga	ctgcagagtg	gagcctcggc	tgggtcccaa	gcacccctg	ccccgccacc	26760
gcccacccct	gtcccgggtc	actcactgcg	tcccaccgcc	ccggcaggtg	gacctttggg	26820
gatggggagc	aggccctcca	ccagttccag	cctccgtaca	acgagtcctt	cccggttcca	26880
gaccctcgg	tggcccaggt	gctggtggag	cacaatgtca	tgcacaccta	cgctgcccc	26940
ggtgagggat	gaggggggtga	gggggccact	gcctttcagg	ctctgagcac	gggtcccccc	27000
agctccccag	tcaagctgcc	ccccttcctc	cccaacagcc	ctcactgtga	cctcacctgg	27060
gctgatggct	taggccctac	tggggtgagg	gagggggccag	gcgtgggggg	agtggacagg	27120
gaagctgggc	ccctgaactg	cgccccccgc	cctccccggg	cctggctctt	gctgctctgc	27180
tgccccgagt	gcagctgcac	ttggaggcgg	tgcgtcctcg	ccaggcagcc	ctcagtgctg	27240
ctacacctgt	gctccgtccc	gcacgtggct	tgggagcctg	ggacccttaa	ggctggggccg	27300
caggtgcagc	cgttcacccc	gggctcctca	ggcggggggc	ttctgccgag	cggggtgggga	27360
gcaggtgggg	gtgccgcggc	tgccccactc	gggcctgtcc	ccacaggtga	gtacctcctg	27420
accgtgctgg	catctaatac	cttcgagaac	cggacgcagc	aggtgcctgt	gagcgtgcgc	27480
gcctccctgc	cctccgtggc	tgtgggtgtg	agtgcggcgc	tcctggtggc	cggccggccc	27540
gtcaccttct	accgcacccc	gctgccctcg	cctggggggtg	ttctttacac	gtgggacttc	27600
ggggacggct	cccctgtcct	gaccagagc	cagccggctg	ccaaccacac	ctatgcctcg	27660
aggggcacct	accacgtgcg	cctggaggtc	aacaacacgg	tgagcgggtg	ggcggcccag	27720
gcggatgtgc	gcgtctttga	ggagctccgc	ggactcagcg	tggacatgag	cctggccgtg	27780
gagcagggcg	cccccggtg	ggtcagcgcc	gcggtgcaga	cgggcgacaa	catcacgtgg	27840
accttcgaca	tgggggacgg	caccgtgctg	tcggggcccg	aggcaacagt	ggagcatgtg	27900
tacctgcggg	cacagaactg	cacagtgacc	gtgggtgcgg	ccagccccgc	cggccacctg	27960
gcccggagcc	tgcacgtgct	ggtcttcgtc	ctggagggtg	tgcgcgttga	accgcgcgcc	28020
tgcaccccca	cgcagcctga	cgcgcggctc	acggcctacg	tcaccgggaa	cccggcccac	28080
tacctcttcg	actggacctt	cggggatggc	tcctccaaca	cgaccgtgcg	ggggtgcccg	28140
acggtgacac	acaacttcac	gcggagcggc	acgttcccc	tggcgctggt	gctgtccagc	28200
cgcgtgaaca	gggcgcatta	cttcaccagc	atctgcgtgg	agccagaggt	gggcaacgtc	28260
accctgcagc	cagagaggca	gtttgtgcag	ctcggggacg	aggcctggct	ggtggcatgt	28320
gcctggcccc	cgttccccta	ccgctacacc	tgggactttg	gcaccgagga	agccgcccc	28380
accctgcca	ggggccctga	ggtgacgttc	atctaccgag	accagggctc	ctatcttgtg	28440
acagtcaccg	cgccaacaa	catctctgct	gccaatgact	cagccctggt	ggagggtgcag	28500

gagcccgtgc	tggtcaccag	catcaaggtc	aatggctccc	ttgggctgga	gctgcagcag	28560
ccgtacctgt	tctctgctgt	gggccgtggg	cgccccgcca	gtacctgtg	ggatctgggg	28620
gacggtgggt	ggctcgaggg	tccggaggtc	acccacgctt	acaacagcac	aggtgacttc	28680
accgttaggt	ggccggctgg	aatgagggtga	gccgcagcga	ggcctggctc	aatgtgacgg	28740
tgaagcggcg	cgtgcggggg	ctcgtcgtca	atgcaagccc	cacggtgggtg	cccctgaatg	28800
ggagcgtgag	cttcagcacg	tcgctggagg	ccggcagtgga	tgtgcgctat	tcctgggtgc	28860
tctgtgaccg	ctgcacgccc	atccctgggg	gtcctaccat	ctcttacacc	ttccgctccg	28920
tgggcacctt	caatatcatc	gtcacggctg	agaacgaggt	gggctccgcc	caggacagca	28980
tcttcgtcta	tgtcctgcag	ctcatagagg	ggctgcaggt	ggtgggcggg	ggccgctact	29040
tccccaccaa	ccacacggta	cagctgcagg	ccgtgggttag	ggatggcacc	aacgtctcct	29100
acagctggac	tgccctggagg	gacagggggc	cgccctggc	cggcagcggc	aaaggcttct	29160
cgctcacctg	ctcgaggccg	gcacctacca	tgtgcagctg	cgggccacca	acatgctggg	29220
cagcgcttgg	gccgactgca	ccatggactt	cgtggagcct	gtgggggtggc	tgatggtggc	29280
cgctccccg	aaccagctg	ccgtcaacaa	aagcgtcacc	ctcagtgccg	agctggctgg	29340
tggcagtggt	gtcgtataca	cttggtcctt	ggaggagggg	ctgagctggg	agacctccga	29400
gccatttacc	acccatagct	tccccacacc	cgccctgcac	ttgggtacca	tgacggcagg	29460
gaaccgcgtg	ggctcagcca	acgccaccgt	ggaagtggat	gtgcaggtgc	ctgtgagtgg	29520
cctcagcatc	agggccagcg	agcccggagg	cagcttcgtg	gcggccgggt	cctctgtgcc	29580
cttttggggg	cagctggcca	cgggcaccaa	tgtgagctgg	tgctgggctg	tgcccggcgg	29640
cagcagcaag	cgtggccctc	atgtcaccat	ggtcttcccc	gatgctggca	ccttctccat	29700
ccggctcaat	gcctccaacg	cagtcagctg	ggtctcagcc	acgtacaacc	tcacggcgga	29760
ggagcccata	gtgggcctgg	tgctgtgggc	cagcagcaag	gtggtggcgc	ccgggcagct	29820
ggtccatttt	cagatcctgc	tggtgcccgg	ctcagctgtc	accttccgcc	tgacggctcg	29880
cggggccaac	cccagaggtg	tccccggggc	ccgtttctcc	cacagcttcc	cccgcgtcgg	29940
agaccacgtg	gtgagcgtgc	ggggcaaaaa	ccacgtgagc	tgggcccagg	cgcaggtgcg	30000
catcgtgggtg	ctggaggccg	tgagtgggct	gcaggtgccc	aactgctgcg	agcctggcat	30060
cggcacgggc	actgagagga	acttcacagc	ccgcgtgcag	cgcggctctc	gggtcgctta	30120
cgcctggtac	ttctcgtgc	agaagggtcca	gggcgactcg	ctgggtcatcc	tgctggggccg	30180
cgcgtcacc	tacacgcccc	tggccgcggg	gctgttggag	atccaggtgc	gcgccttcaa	30240
cgcctggggc	agtgagaacc	gcacgctggg	gctggagggt	caggacgccc	tccagtatgt	30300
ggccctgcag	agcggcccct	gcttcaccaa	ccgctcggcg	cagtttgagg	ccgccaccag	30360

09904959-07101

ccccagcccc	cggcgtgtgg	cctaccactg	ggactttggg	gatgggtcgc	cagggcagga	30420
cacagatgag	cccagggccg	agcactccta	cctgaggcct	ggggactacc	gcgtgcaggt	30480
gaacgcctcc	aacctgggtga	gcttcttcgt	ggcgcaggcc	acggtgaccg	tccaggtgct	30540
ggcctgccgg	gagccggagg	tggacgtggt	cctgcccctg	caggtgctga	tgcggcgatc	30600
acagcgcaac	tacttggagg	cccacgttga	cctgcgcgac	tgcgtcacct	accagactga	30660
gtaccgctgg	gaggtgtatc	gcaccgccag	ctgccagcgg	ccggggcgcc	cagcgcgtgt	30720
ggccctgccc	ggcgtggacg	tgagccggcc	tcggctgggtg	ctgccgcggc	tggcgctgcc	30780
tgtggggcac	tactgctttg	tgtttgtcgt	gtcatttggg	gacacgccac	tgacacagag	30840
catccaggcc	aatgtgacgg	tggcccccg	gcgcctgggtg	cccatcattg	agggtggctc	30900
ataccgcgtg	tggtcagaca	cacgggacct	ggtgctggat	gggagcgagt	cctacgaccc	30960
caacctggag	gacggcgacc	agacgccgct	cagtttccac	tgggcctgtg	tggtctcgac	31020
acaggtcagt	gcgtggcagg	gccgtcctcc	atgcccctca	cccgtccaca	cccatgagcc	31080
cagagaacac	ccagcttgcc	accagggctg	gcccgtcctc	agtgcctggt	gggccccgtc	31140
ccagcatggg	gaggggggtct	cccgcgctgt	ctcctggggc	gggctctgct	ttaaaactgg	31200
atggggctct	caggccacgt	cgccccttgt	tctcggcctg	cagagggagg	ctggcggggtg	31260
tgcgctgaac	tttgggcccc	gcgggagcag	cacggtcacc	attccacggg	agcggctggc	31320
ggctggcgtg	gagtacacct	tcagcctgac	cgtgtggaag	gccggccgca	aggaggaggc	31380
caccaaccag	acggtgggtg	ccgcccggcc	ctcggccact	tgccttggac	agcccagcct	31440
ccctggtcac	ctactgtttt	ccgtgtttta	gtgctgggtg	aggccgcacg	ctctcccctc	31500
tctgtttctg	atgcaaattc	tatgtaacac	gacagcctgc	ttcagctttg	cttccttcca	31560
aacctgccac	agttccacgt	acagtcttca	agccacatat	gctctagtgg	caaaagctac	31620
acagtcccct	agcaatacca	acagtgagga	agagcccctt	cccaccccag	aggtagccac	31680
tgtccccagc	ccatgtccct	gttgctggat	gtgggtgggc	ggttctcacc	ctcacgctcc	31740
cctctctgga	ccggccagga	ggcttgggtga	ccctgagccc	gtgggtggctg	ctcctgctgc	31800
tgtcaggcgg	ggcctgctgg	tgccccagag	tgggcgtctg	ttccccagtc	cctgctttcc	31860
tcagctggcc	tgattggggg	tcttcccaga	ggggctcgtct	gaggggaggg	tgtgggagca	31920
ggttccatcc	cagctcagcc	tcctgaccca	ggccctggct	aagggtctgca	ggagtctgtg	31980
agtcaggcct	acgtggcagc	tgcggtcctc	acaccacac	atacgtctct	tctcacacgc	32040
atccccccag	gggcccctcag	tgagcattgc	ctgcctcctg	ctagggtcca	gctgggtcca	32100
gtacaccaga	acgcacactc	cagtgtcctc	tgcctgtgtg	atgcccttcc	gccgtccaag	32160

05904968-01301

ttggaaggtg	gcaaaccgga	tgagtatcct	gggagggagt	gagctcaccg	gcagtggcca	32220
ggccccctggg	aaacctggag	tttgggagca	gcacccctcca	tgggtcccc	agtccttcca	32280
gcaggccaaa	tagacctgtg	ttggaggtaa	ccccactccc	acgccaggtg	ctgatccgga	32340
gtggccgggt	gcccattgtg	tccttggagt	gtgtgtcctg	caaggcacag	gccgtgtacg	32400
aagtgagccg	cagctcctac	gtgtacttgg	agggccgctg	cctcaattgc	agcagcggct	32460
ccaagcgagg	ggtgagtgtt	gagcgggggtg	tgggcgggct	ggggatgggt	cccatggccg	32520
aggggacggg	gcctgcaggc	agaagtgggg	ctgacagggc	agagggttgc	gccccctcac	32580
cacccttct	gcctgcagcg	gtgggctgca	cgtacgttca	gcaacaagac	gctgggtgctg	32640
gatgagacca	ccacatccac	gggcagtgca	ggcatgcgac	tgggtgctgcg	gcggggcgctg	32700
ctgcgggacg	gcgagggata	caccttcacg	ctcacgggtgc	tgggccgctc	tggcgaggag	32760
gagggtgctg	cctccatccg	cctgtcccc	aaccgcccgc	cgctgggggg	ctcttgccgc	32820
ctcttccac	tgggcgctgt	gcacgccctc	accaccaagg	tgcacttcga	atgcacgggt	32880
gagtgcaggc	ctgcgtgggg	ggagcagcgg	gatccccga	ctctgtgacg	tcacggagcc	32940
ctcccgtgat	gccgtgggga	ccgtccctca	ggctggcatg	acgcggagga	tgctggcgcc	33000
ccgctgggtgt	acgccctgct	gctgcggcgc	tgctcgccagg	gccactgcga	ggagttctgt	33060
gtctacaagg	gcagcctctc	cagctacgga	gccgtgctgc	ccccgggttt	caggccacac	33120
ttcgaggtgg	gcctggccgt	ggtggtgcag	gaccagctgg	gagccgctgt	ggtcgccctc	33180
aacaggtgag	ccaggccgtg	ggagggcgcc	cccagactg	ccacctgctc	accacccct	33240
ctgctcgtag	gtctttggcc	atcacccctc	cagagcccaa	cggcagcgca	acggggctca	33300
cagtctggct	gcacgggctc	accgctagt	tgctcccagg	gctgctgcgg	caggccgac	33360
cccagcacgt	catcgagtac	tcgttggccc	tggtcaccgt	gctgaacgag	gtgagtgcag	33420
cctgggaggg	gacgtcacat	ctgctgcatg	cgtgcttggg	accaagacct	gtacccctgc	33480
ctggagcttt	gcagagggct	catcccgggc	cccagagata	aatcccagtg	accctgaagc	33540
agcaccgccga	ccttccgctc	ccagcagcca	caccaccggg	gccctctccg	gcgtctgctt	33600
tccacaatgc	agcccccgcc	caggagggcc	catgtgctta	ccctgttttg	cccatgaaga	33660
aacagctcag	tggtgtgggt	cagtgcgccg	atcacacagc	gtctagcacg	taactgcacc	33720
ccgggagtcg	tgggcatctg	ctggcctcct	gccggcctcc	tgcgctgctg	acagcttgct	33780
gtgccccctg	cctgccccag	tacgagcggg	ccctggacgt	ggcgagagc	ccaagcacga	33840
gcggcagcac	cgagcccaga	tacgcaagaa	catcacggag	actctgggtg	ccctgagggt	33900
ccacactgtg	gatgacatcc	agcagatcgc	tgctgcgctg	gccagtgca	tggtaggatg	33960
gccccacctg	ctcacccctgc	cccgcattgc	tgccagggca	ctgggttcag	ccccccaggg	34020

09045-0450

cagacgggca gcttggccga ggagctgagc ctccagcctg ggctccttcc tgccatggcg 34080
 ttccctcggtc tctgacctgc ttcagtagcc tcagccgttc tgcctgtgt gaacgcaggg 34140
 tgcctctcgg gggacccagg gtgtaaagag gggcccagat gtggggaggg actaagaaga 34200
 tgctgctctg tgccctccac tctccctcc cctccctcc cccttccctc ccctagcccc 34260
 tccctccctc ccctcccta gcccttccc tctccctcc ccctagccct ttcccttctt 34320
 cccccccage ccttccctc ctccctccc ctagccctc ccctccctcc ctccctacc 34380
 ccttccctc ctccctccc ctagacctc ccctccctc ctcccgctga gccctccac 34440
 tegtcccca gccctccct ccctagccc ctccctccc ccttccctcc ctccctcccc 34500
 tccctccctc ccctccctc ttctccccc tccctccctc cccttccctc ccctctccctc 34560
 ccctccctc cctgtccccc ctctccctc cctccctct ccctccctc ccctccctc 34620
 tccctccctc ccctccctc tctccctcc cctccctcct ccctccctc tctccctc 34680
 ctccctccc ctccctccc tccctccctc ctccctccc ctccctccc ccctccctc 34740
 cctctccctc tccatccct cctcccatc ctccctccc ttccattct ctccctccc 34800
 cctccattt ctccctccc ccctgccct cctctccctc tcacctccc ttctccgctc 34860
 cttctctctc ctccctccct ttctctccct cctcccttc tcccttctc ctcttctccc 34920
 cttctccctc cttttcatc ttcccttctt ccctccttc ctccctttt ccctcttctc 34980
 cccctccctc ccctccctc tctccctatt cccctccctc cccctccca ttccctccctc 35040
 tccctccctc cctccctcca ttacctccct tctccctccc tctccctacc ccctctccct 35100
 ccggtccct ctccctccct cctcatccc ctccctccct tccctccctaa cccctccctc 35160
 ctccctccct cctcatccc ctccctccct tccctccctc taccctccct cctctccctc 35220
 cctccctcta ttccctccct tctccctccc tcttccctc tctctccctc ccctgcccc 35280
 tctccctc ctccatccc cctccctccc tctccctcc tccatccca tccctccctc 35340
 ctccctccct tctctccct cctctccctc cctccctcc tctctccctc tctccctc 35400
 ctccatccc ccctccctc atccctccc ctctccctc cactccctc ctccctactc 35460
 ctctccctc ctatccccc tctctctcc tccctccccc ctccctccct tccctccctc 35520
 tttccctccc tccctccctc tccctccctc cccctccctc ctccctatcc cccttccctc 35580
 tctccctc tccctccccc cttctctttt tccctccctc tcccttccct ctccctctt 35640
 ctccctttt cccttttctc ttctctccct ccccttctc cctccgtcc tccctccctc 35700
 tctctcttcc tttccctcc ttcttctcc cctgttctcc tccctccctc tctcccttt 35760
 tctccctcc tcttccctc ccctccctc tttctctgtt tctcttccct tccctccac 35820

05404950
 39540550
 20
 05404950

tttcccccttc	ctttccccctc	tccttttctcc	ttccttttctt	ctcccccttct	cttcctttttc	35880
ctctctcccc	ttctttttccc	tcttccccctc	ccctcctctt	ccccccccct	cctcttcccc	35940
tccccctctc	ttccccctccc	ctcctcttcc	cctctcctcc	tcttccccctc	ccctcctctt	36000
tccctccccct	cttctcctcc	cctcctctcc	cctcttcccc	tccccctctc	ttccctcccc	36060
ttccccctccc	ctcctcttcc	ctccccctcc	cctccccctcc	tcttccccctc	ccttccccctc	36120
ctcttccctc	ctctcttccc	ctccccctct	cttccccctcc	ctcttccccct	cccccttctct	36180
tctcctcccc	ttctcttccc	ctccccctttt	cttccccctc	cttgctcttcc	ctgccctcct	36240
cttccccctcc	ctcctcttcc	ctccccctctt	ccccctctcct	cctcttcccc	ccccctcttcc	36300
tctttcctct	tccccctcccc	tcctcctccc	tcccccttcc	cctcttcccc	tccccctcgc	36360
ttccccctccc	tttctcccccc	ttctctcccc	tccccctctcc	cccccttctct	ccccctcccc	36420
ctcccccttc	tctccccctcc	cctctcccccc	ttctctcccc	tctcctctcc	cccccttctct	36480
cccccttctct	cccccttctc	tctcccccttc	tctccccctt	ctctccccctc	cccccttctc	36540
tccccctcccc	tctccccctt	ctctccccctc	ccctctcccc	tgtcctctcc	tctccaccct	36600
tctctccccct	ccccctctcct	ctcccccttc	cctctcctct	cccccttctc	tccccctcccc	36660
tctcctctcc	cccccttttct	ccactccccct	ctcctctctc	ccctcctcct	ccgctctcat	36720
gtgaagaggt	gccttgtgtg	gtcgggtgggc	tgcatacagt	ggccccagg	tggaggccct	36780
gggtcatgca	gagccacaga	aaatgcttag	tgaggaggct	gtgggggtcc	agtcaagtgg	36840
gctctccagc	tgcagggctg	gggggtgggag	ccagggtgagg	accggtgtag	agaggagggc	36900
gtgtgcaagg	agtgggggcca	ggagcgggggc	tggacactgc	tggctccaca	cagggggcca	36960
gcagggagct	cgtatgccgc	tcgtagcctga	agcagacgct	gcacaagctg	gaggccatga	37020
tgctcatcct	gcaggcagag	accaccgcgg	gcaccgtgac	gcccaccgcc	atcggagaca	37080
gcatactcaa	catcacaggt	gccgcggccc	gtgccccatg	ccaccgcgcc	gccccgtgcg	37140
gccctttcct	ctgectccct	cctcccccca	accgcgtcgc	ctttgccccca	tcccatcttc	37200
gtccccctcc	cctcccccca	attcccatcc	tcataccccct	cccccaattc	ccattctcct	37260
ccccctcccc	cttccctatt	accatccctt	ttctccatct	ctctccccctt	ttctccattt	37320
ccccccccgt	cctccccgtc	cttttgtcca	ttccccctcat	cttctcctcc	ccccctcatcc	37380
cccttccccct	cccttatccc	ccttccccctc	cctttcccccc	tgtcctctct	cttctccccct	37440
ctctttttctc	taccctttttc	cttctttttt	cctccccctcc	cccatcatcc	ccctcatctt	37500
cgtcctcctc	cccatcacct	tccccctccc	ccctccacca	ctctctctcc	agcttcccccc	37560
ttcctttctgc	ctgcacctcg	ctctctgccc	cctcagggttc	cccccttctc	ccagccccca	37620
ccctccgggt	cccccttttt	gcctgcccccc	accctccctc	tacctccctg	tctctgcact	37680

T0120 3964060

gacctcacgc	atgtctgcag	gagacctcat	ccacctggcc	agctcggacg	tgcgggcacc	37740
acagccctca	gagctgggag	ccgagtcacc	atctcggatg	gtggcgtccc	aggcctacaa	37800
cctgacctct	gccctcatgc	gcatacctcat	gcgctcccgc	gtgctcaacg	aggagcccct	37860
gacgctggcg	ggcgaggaga	tcgtggccca	gggcaagcgc	tcggacccgc	ggagcctgct	37920
gtgctatggc	ggcgccccag	ggcctggctg	ccacttctcc	atccccgagg	ctttcagcgg	37980
ggccctggcc	aacctcagtg	acgtgggtgca	gctcatcttt	ctgggtggact	ccaatccctt	38040
tccctttggc	tatatcagca	actacaccgt	ctccaccaag	gtggcctcga	tggcattcca	38100
gacacaggcc	ggcgcccaga	tccccatcga	gcggctggcc	tcagagcgcg	ccatcacccgt	38160
gaaggtgccc	aacaactcgg	actgggctgc	ccggggccac	cgcagctccg	ccaactccgc	38220
caactccgtt	gtggtccagc	cccaggcctc	cgtcggtgct	gtggtcaccc	tggacagcag	38280
caaccctgcg	gccgggctgc	atctgcagct	caactatacg	ctgctggacg	gtgcgtgcag	38340
cgggtggggc	acacgcggcc	ccctggcctt	gttcttgggg	ggaaggcggt	tctcgtaggg	38400
cttccatggg	tgtctctggt	gaaatttgct	ttctgtttca	tgggctgctg	ggggcctggc	38460
cagagaggag	ctggggggcca	cggagaagca	ggtgccagct	ctggtgcaga	ggctcctatg	38520
ctttcaggcc	cgtggcagag	ggtgggctca	ggagggccat	cgtgggtgtc	ccccgggtgg	38580
ttgagcttcc	cggcaggcgt	gtgacctgcg	cgttctgccc	caggccacta	cctgtctgag	38640
gaacctgagc	cctacctggc	agtctaccta	cactcggagc	cccggcccaa	tgagcacaac	38700
tgctcggcta	gcaggaggat	ccgcccagag	tcactccagg	gtgctgacca	ccggccctac	38760
accttcttca	tttccccggg	gtgagctctg	cgggccagcc	tggcagggca	gggcagggca	38820
tcatgggtca	gcattgcctg	ggttactggc	cccatgggga	cggcaggcag	cgaggggact	38880
ggaccgggta	tgggctctga	gactgcgaca	tccaacctgg	cggagcctgg	gctcacgtcc	38940
gctacccctt	ccctgcccag	gagcagagac	ccagcgggga	gttaccatct	gaacctctcc	39000
agccacttcc	gctggtcggc	gctgcagggtg	tccgtgggcc	tgtacacgtc	cctgtgccag	39060
tacttcagcg	aggaggacat	ggtgtggcgg	acagaggggc	tgctgccctt	ggaggagacc	39120
tcgccccgcc	aggccgtctg	cctcaccgcg	cacctcacccg	ccttcggcgc	cagcctcttc	39180
gtgcccccaa	gccatgtccg	ctttgtgttt	cctgtgagtg	accctgtgct	cctgggagcc	39240
tctgcagagt	cgaggagggc	ctgggtgggc	tcggctctat	cctgagaagg	cacagcttgc	39300
acgtgacctc	ctgggcccgg	cggctgtgtc	ctcacaggag	ccgacagcgg	atgtaaacta	39360
catcgtcatg	ctgacatgtg	ctgtgtgcct	ggtgacctac	atggtcatgg	ccgccatcct	39420
gcacaagctg	gaccagttgg	atgccagccg	gggccgcgcc	atccctttct	gtgggcagcg	39480

0904560 "01301

gggccgcttc aagtacgaga tcctcgtcaa gacaggctgg ggccggggct cagggtgaggg 39540
 gcgcagcggg gtggcagggc ctccccctgct ctacttggt gtgctgggtg caccctctgg 39600
 gagtgagtct cgtcgcaggc gtcagaacaa ggcagttttt gcagtgctgt gtgaagggct 39660
 cgtgtgttca tcctgggaat gacctcgtga gcactcactg tccctgagga ctaggacagc 39720
 tcctagctgg aagtaggtgc cagtcagtca ggggtgggcag cccacgttct gcacagtagc 39780
 gtggccccac aagtgacgtg agcatcgcta ccactgtggg agactgtgca tccacccgcg 39840
 atcctgactg catagctcgt ctctcagacg gaggcgccag caccctcccc gtggctgttt 39900
 cttcagtacc tccattttcc ttccattgga attgcccttc tggcattccc tttttgtttt 39960
 cgtttttctt tttttagaga cggagtctca ctctgttgcc caggctggag tgcaatggca 40020
 tgatcttggc tcacagcaac ttccagctcc cgggtttaag ccattcccct taagcgattc 40080
 tcctgagtag ctgggagtag aggtgcacac caccacacc agttaatttt tcaccatgtc 40140
 agccaggcga actcctgacc tcaggtgatc cgctgcctc ggctgccag agtgctggga 40200
 tgacagggtg gagccaccac acctggctgt gttcccattt tttatctctg tgctgctttc 40260
 ctcttcattg cccagttctt tcttttgatt acctactttt aaaaactgtc ggccggggcg 40320
 ggtggctcac acctgtaatc cgagcacttt gggaggccag gcaggcaa at cacgggggtca 40380
 ggagatcgag accatcctgg ctaacgggtga aaccctgtct ctaataaaaa gtacaaaaaa 40440
 attagcccgg cgtagtggca ggcgcctgta gtcccagctc cttgggagac tgaggcagga 40500
 gaatggcgtg aaccggggag gcggagcttg cagtgaagct agattgcgcc actgcactcc 40560
 agcctgggtg acacagcaag actccatctc aaaaaaaaaa gaaaaaaaaa actgtcacct 40620
 gggctctgtca ctgggagagg aggtgacaca gcttcacgct ttgcagtctg tgcataaact 40680
 gagggacggg tgtgtgggtg gggtcaccgg ttgtggcatg actgaggcgt ggacagggtg 40740
 gcagtgcggg tcaactgggtg tgggtgtggac tgaggcgtgt gcagccatgt ttgcatgtca 40800
 caagttacag ttctttccat gtaacttaat catgtccttg aggtcctgct gtttaattgga 40860
 caaattgcag taaccgcagc tccttgtgta tggcagagcc gtgcaaagcc gggactgcct 40920
 gtgtggctcc ttgagtgcgc acaggccaaa gctgagatga cttgcctggg atgccacacg 40980
 tgttgggcag cagaccgagc ctcccacccc tccctcttgc ctcccaggta ccacggccca 41040
 cgtgggcctc atgctgtatg ggggtggacag ccggagcggc caccggcacc tggacggcga 41100
 cagagccttc caccgcaaca gcctggacat cttccggatc gccaccccgc acagcctggg 41160
 tagcgtgtgg aagatccgag tgtggcacga caacaaagggt ttgtgcggac cctgccaagc 41220
 tctgcccctc tgcccccgca ttggggcgcc ctgcgagcct gacctccctc ctgcgcctct 41280
 gcagggtca gccctgcctg gttcctgcag cacgtcatcg tcagggacct gcagacggca 41340

090458-01301

cgcagcgcct	tcttcctggt	caatgactgg	ctttcggtgg	agacggaggc	caacgggggc	41400
ctggtggaga	aggaggtgct	ggccgcgagt	aaggcctcgt	tccatggtec	cactccgtgg	41460
gaggttgggc	agggtggtec	tgccccgtgg	cctcctgcag	tgcggccctc	cctgccttct	41520
aggcgacgca	gcccttttgc	gcttccggcg	cctgctggtg	gctgagctgc	agcgtggctt	41580
ctttgacaag	cacatctggc	tctccatatg	ggaccggccg	cctcgtagcc	gtttcactcg	41640
catccagagg	gccacctgct	gcgtttctct	catctgcctc	ttcctgggcg	ccaacgccgt	41700
gtggtacggg	gctgttggcg	actctgccta	caggtgggtg	ccgtaggggt	cggggcagcc	41760
tcttcctgcc	cagcccttcc	tgccccctcag	cctcacctgt	gtggcctcct	ctcctccaca	41820
cagcacgggg	catgtgtcca	ggctgagccc	gctgagcgtc	gacacagtcg	ctgttggcct	41880
ggtgtccagc	gtggttgtct	atcccgtcta	cctggccatc	ctttttctct	tccggatgtc	41940
ccggagcaag	gtgggctggg	gctggggacc	cgggagtact	gggaatggag	cctgggcctc	42000
ggcaccatgc	ctagggccgc	cactttccag	tgctgcagcc	agagggaaag	gcgtccacca	42060
aaggctgctc	gggaagggtc	aacacacttg	agcagcctta	gctagactga	ccagggagaa	42120
agagagaaga	ctcagaagcc	agaatggtga	aagaacgagg	gcactttgct	aagcagacgc	42180
cacggacgac	tgcacagcag	cacgccagat	aactcagaag	aagcaagcac	gcggctgtgc	42240
acgcttccga	aatgcactcc	agaagaaaat	ctcagtacat	ctataggaag	tgaagaggct	42300
gagttagtcc	cttagaaacg	tcccagtggc	cgggccgggt	gtggtggctc	acgcctgtaa	42360
tcccaacact	tcaggtggcc	gaggtgggcg	gatctgagtc	caggagtttg	agaccagcct	42420
gggcaacata	gcaagacccc	atctatataa	aacattaata	agggccaggc	gcggtggctc	42480
acgcctgtaa	tcccagcact	ttgggaggcc	gaggcgggca	gatcacttga	ggtcaggagt	42540
tcgagaccag	cctggccaac	acaatgaaac	cccgactcta	ctacaaatac	aaaaacttag	42600
ctgggcatgg	tggcggggcg	ctgtagtccc	agctactcga	gaggctgagg	caggagaatg	42660
gcatgaaccc	aggaggcgga	gcttgcagtg	agccgagatt	gcgccactgc	actccatcct	42720
gggcaacgga	gcaagactcc	atctccaaaa	aaaaaaaaaa	aaaatcccac	aaagaaaagc	42780
tcagggtcag	agccttcacg	atagaatttt	tctaagcagt	taaggaagaa	ttaacaccaa	42840
tccttcacag	actctttcca	agaatacagc	aggtgggaac	gcttcccatt	catacggaaa	42900
cgggaggccg	cacccttag	gaatgcacac	gtggggtcct	caagaggtta	catgcaaact	42960
aaccccagca	gcacacagag	aaggcgcata	agccgcgacc	aggaggggtt	gctcccgagt	43020
ccgtggcagg	aaccagaggc	cacatgtggc	tgctcgtatt	taagttaatt	aaaatggaac	43080
gatggccggg	tgtggtggct	cacacctgta	atcccagcac	tttgggaggc	ggaggcgggc	43140

agatcacttg	aggtcaggag	ttccaagacc	agcctggcca	acacagtga	accccgctctc	43200
tactaaaaat	acaaaaaatt	agctgggcat	ggtggcaggc	acctgtaatc	ccagctactc	43260
aggaggctga	gccaggacaa	tcgcctgaac	gcgggaggtg	gaggttgcag	tgagctgaga	43320
ttgcgccatt	gcactccagc	ctgggtgaca	gcgagactcc	atctaaaaaa	gaaaatatga	43380
aatttaaaac	tctgttcctt	agctgcacca	gtctgctgtc	aagtgttcag	tggcacacgt	43440
cgcgaggggc	tgccatcacg	gacggtgcag	atgtcccata	tatccagcat	tctaggacat	43500
tctgtcagat	ggcaccgggc	tctgtcctgt	ctgctgagga	ggtggcttct	catccctgtc	43560
ctgagcaggt	ctgagctgcc	gcccgtgac	cactgccttc	gtcctgcagg	tggctgggag	43620
cccagagccc	acacctgccg	ggcagcaggt	gctggacatc	gacagctgcc	tggactcgtc	43680
cgtgctggac	agctccttcc	tcacgttctc	aggcctccac	gctgaggtga	ggactctact	43740
gggggtcctg	ggctgggctg	gggggtcctgc	cgccttggcg	cagcttggac	tcaagacact	43800
gtgcacctct	cagcaggcct	ttgttggaca	gatgaagagt	gacttgtttc	tggatgattc	43860
taagaggtgg	gttccctaga	gaaacctcga	gccctgggtgc	aggtcactgt	gtctgggggtg	43920
ccgggggtgt	gcgggctgcg	tgtccttgct	gggtgtctgt	ggctccatgt	ggtcacacca	43980
cccgggagca	ggtttgctcg	gaagcccagg	gtgtccgtgc	gtgactggac	gggggtgggc	44040
tgtgtgtgtg	acacatcccc	tggtaccttg	ctgaccgcg	ccacctgcag	tctggtgtgc	44100
tggccctccg	gcgagggaac	gctcagttgg	ccggacctgc	tcagtgacce	gtccattgtg	44160
ggtagcaatc	tgccgcagct	ggcacggggc	caggcgggcc	atgggctggg	cccagaggag	44220
gacggcttct	ccctggccag	cccctactcg	cctgccaaat	ccttctcagc	atcaggtgag	44280
ctgggggtgag	aggagggggc	tctgaagctc	acccttgcag	ctgggcccac	cctatgcctc	44340
ctgtacctct	agatgaagac	ctgatccagc	aggtccttgc	cgaggggggtc	agcagcccag	44400
cccctacca	agacaccac	atggaaacgg	acctgctcag	cagcctgtga	gtgtccggct	44460
ctcgggggag	gggggattgc	cagaggaggg	gccgggactc	aggccaggca	gccgtgggtc	44520
ccgcctgggg	taggggtggg	tgggggtgcca	gggcagggct	gtggctgcac	cacttcactt	44580
ctctgaacct	ctgttgtctg	tggaaagagc	ctcatgggat	ccccagggcc	ccagaacctt	44640
ccctctaggg	agggagcagg	ctcatggggc	tttgtaggag	cagaaaggct	cctgtgtgag	44700
gctggccggg	gccacgtttt	tatcttggtc	tcagagcagt	gagaaattat	gggcgggttt	44760
ttaaataccc	catttttggc	cgggcgcggt	ggctcacacg	tgtaatccca	gcactttggg	44820
aggccgaggt	gggcagatga	cctgaggtca	gcagttcgag	accagcctgg	ccaacatggc	44880
gaaaccccgt	ctctactaaa	aatacaaaaa	attagccggg	catgctggca	ggcgcctgta	44940
gtcccagtta	ctcgggagac	tgaggtagga	gaatcgattg	aacctggtag	gtgaagggtg	45000

09040394060

tagtgagccg	agatcgcgcc	actgcactcc	agcctgggca	acaagagcga	aactccgtct	45060
caaaaacaaa	aaaattcctc	aattttcttg	ttgttttgta	acttatcaac	aaatggtcac	45120
atagaggtta	ccttgatatg	agtcacgcac	atagtcacgc	acatggcagc	cggcggcgga	45180
gcgcacccac	ggcgtgttcc	cacgcgtgtg	accccgggct	ctgccatgcc	ctcctatgct	45240
caggtgtgct	gaggtccaca	cggccctgcc	gttgcaactgc	agctgcctgc	aggattcagt	45300
gcagtggcat	gcagtgcagg	tgcggtgccc	cggagccaca	ggccacacca	cagggcctgc	45360
atgcacaggg	gctgcggtgt	ctgggttttg	gtaactacgc	cctgtgacac	ttgcacagca	45420
acagaattac	ctaatgacgc	atttctcaga	acacatccct	ggcactaagt	ggtgcgtgac	45480
tgctgctttt	gcacccacac	ctagtttgat	ttgtgtgtta	ttcctttgag	tgcttctcat	45540
tgtaagcaa	ccaagaacta	aagaggtatg	aactgcccct	ggactcaaac	aaaaaggaaa	45600
acttcctgat	ttacaaaagg	cagataacca	tcacatgagg	gcacctttat	gaataaattg	45660
ctggttgggt	ttaaaaatac	agagtatggg	gaaatccagg	ggtagtcact	acatgctgac	45720
cagccccagg	tatctccggc	ccaaagctct	gtgaaatcca	gattcagtgc	ttccgcgggg	45780
atttctgacg	gcagctcaga	ctccgcaccc	acacagagcg	cgtggccctc	accctcccgg	45840
cttctcaac	ccttgggcgt	cccttgctcg	gacagtgctt	cgggctgacc	aggtcggagg	45900
cttgggtttg	tcctggaccc	ctctgcgtcc	ttctcactg	cagcctccag	cgcgtcccgt	45960
ggctcctttc	ccaacgcaga	gcacggcctt	ccctgcgcct	gagcctgcac	cctccgtcct	46020
ggcggcgcc	ctgccctggc	attccctgcc	actccatgcc	tcctatttgg	ccattctccg	46080
tctctgccag	cgagagcctg	ctccctgagt	cagaccctga	gtcatttgtg	ttgctataaa	46140
ggaatagttg	aggctgggtt	attttttatt	tttattttatt	tttttgagat	ggagtctctg	46200
ttgccacagc	tggagtgcag	tcgcatgatc	tcggctcact	gcaaagtctg	cctcccacgt	46260
tcaagcagtt	atctgcctca	gcctcccaag	tagctaagat	tacaggcgcc	cgccgccaca	46320
gccggctaata	tttttggtgt	tgtgtttttg	tagagaggag	gtttcaccat	cttagccagg	46380
ctggtcttga	actcctgacc	tcgtgatcca	cccatctcag	cctcccaaaa	tgctgagatt	46440
acaggcgtga	gccaccacgc	ctgaccaagt	tgaggctagg	tcatttttta	attttttgta	46500
aagacagggt	ctcactgtct	ccaactcctg	agctcaagtg	atcctcctgc	ctcagcctcc	46560
tgaagtgctg	ggattacagg	cttgagacac	tgcgcccagc	caagagtgtc	ttttatcctc	46620
cgagagacag	caaaacagga	agcattcagt	gcagtgtgac	cctgggtcag	gccgttcttt	46680
cggatgatgg	ctgacgaggg	cgcagggtac	ggagagcgtc	ctgagagccc	gggactcggc	46740
gtctcgcagt	tggctctcgc	ctccccctca	acgtgtcttc	gctgcctctg	tacctcttct	46800

ctagcagctc tgggaccggg catatcagca tgggtggccc atgcagtggc acagcctcgg 46860
 tggtcactgg ctcttgagaga cacaagcaga tctctggcct cagggagccc tacacactgt 46920
 tgggatttga aaggcattca tatgtttcct tgtccagaag ttaatttttag gccataaacc 46980
 tgcattgggac agacacactg gcgtctctag attgtagaga tgcttggttg atggttgaga 47040
 cccaatcata gtttgcaggg ttgaaggggg gctcattgca ccctgagaga ctgtgcactg 47100
 ctgtaagggc agctggtcag gctgtgggag atgggtttat cagcagcaag cgggcgggag 47160
 agggacgcag gcggacgcct gacttcgggtg cctggagtgg ctcttggttc cctggctccc 47220
 agcaccactc ccactctcgt ttggggtagg gtcttcgggc tttttgtcgg ggggaccctg 47280
 tgaccaaga ggctcaagaa actgcccggc caggttaaca tgggcttggc tgcaactgcc 47340
 tcctggaggc cgggatgaat tcacagccta ccatgtccct caggctcagc actcctgggg 47400
 agaagacaga gacgctggcg ctgcagaggc tgggggagct ggggccaccc agcccaggcc 47460
 tgaactggga acagccccag gcagcgaggc tgtccaggac aggtgtgctt gcgtagcccc 47520
 gggatgcccc tagccctcc ctgtgagctg cctctcacag gtctgtctct gcttccccag 47580
 gactggtgga gggctctcgg aagcgccctg tgccggcctg gtgtgcctcc ctggcccacg 47640
 ggctcagcct gctcctgggtg gctgtggctg tggtgtctc aggggtgggtg ggtgcgagct 47700
 tccccccggg cgtgagtgtt gcgtggctcc tgtccagcag cggcagcttc ctggcctcat 47760
 tcctcggctg ggagccactg aagggtgagg ggctgccagg ggtaggctac aggcctccat 47820
 cacgggggac ccctctgaag ccaccccctc ccaggtctt gctggaagcc ctgtacttct 47880
 cactggtggc caagcggctg caccggatg aagatgacac cctggtagag agcccggctg 47940
 tgacgcctgt gagcgacgt gtgccccgag tacggccacc ccacggcttt gcactcttcc 48000
 tggccaagga agaagcccgc aagggtcaaga ggctacatgg catgctgcgg gtgagcctgg 48060
 gtgcggcctg tgcccctgcc acctccgtct cttgtctccc acctcccacc catgcacgca 48120
 ggacactcct gtcccccttt cctcacctca gaaggccctt aggggttcaa tgctctgcag 48180
 cctttgcccg gtctccctcc taccacagc ccccacttg ctgccccagt ccctgccagg 48240
 gccagctcc aatgccact cctgcctggc cctgaaggcc cctaagcacc actgcagtgg 48300
 cctgtgtgtc tgccccaggg tggggttccg ggcagggtgt gtgctgccat taccctggcc 48360
 aggtagagtc ttggggcgcc ccctgccagc tcaccttct gcagccacac ctgccgcagc 48420
 catggctcca gccgttgcca aagccctgct gtcactgtgg gctggggcca ggctgaccac 48480
 agggccccc cgtccaccag agcctcctgg tgtacatgct ttttctgctg gtgaccctgc 48540
 tggccagcta tggggatgcc tcatgccatg ggcacgccta ccgtctgcaa agcgccatca 48600
 agcaggagct gcacagccgg gccttctgg ccatcacgag gtacgggcat ccggtgcact 48660

0906-94050

ggtctgtctt ctgggcttta gttttgcctt tagtccagcc agaccctagg ggacatgtgg 48720
 acatgtgtag atacctttgt ggctgctaga actggaggta ggtgctgctg gcatcagtag 48780
 gcagagggga gggacacagg tccgtgtctt gcagtgcaca ggacgggccc atgacagaca 48840
 actgtctgcc ccagaacatc cccaggataa ggctgagaag cccagggtcta gccgtggcca 48900
 gcagggcagt gggagccatg ttccctgggt ctctgggtggc cgctcactcg aggcgggcat 48960
 ggggcagtag gggctggagc gtgtgactga tgctgtggca ggtctgagga gctctggcca 49020
 tggatggccc acgtgctgct gccctacgtc cacgggaacc agtccagccc agagctgggg 49080
 ccccccacggc tgccggcaggt gcggctgcag gaaggtgagc tggcagggcg tgccccaaga 49140
 cttaaatacgt tcctcttggt gagagagcag cctttagcgg agctctggca tcagccctgc 49200
 tccttagctg tgtgacctt gccctcttaa caccgccgtt tccttctctg tatatgagag 49260
 atggtaacgt tgtctaattg atggctgctg ggagggttcc ctgggggtggc gccgaaccag 49320
 agctcaggcg agctggccag caggaaacac tcctgttggg ttttgatgag gccctggccc 49380
 cggcctgggg ctctgtgtgt ttcagcactc taccagacc ctcccggccc cagggtccac 49440
 acgtgctcgg ccgcaggagg cttcagcacc agcgattacg acgttggctg ggagagtcct 49500
 cacaatggct cggggacgtg ggcctattca gcgccggatc tgctggggtg agcagagcga 49560
 gggccccggg cgtctacgcc aaggacaagg gagtagttct ccaggagtgc cgcggcctcc 49620
 tgaccagcct ggctccgggg tgccggaagg gctggggtgc ggcaccacg ccacccctct 49680
 ccggcagggc atggtcctgg ggctcctgtg ccgtgtatga cagcgggggc tacgtgcagg 49740
 agctgggcct gagcctggag gagagccgcg accggctgcg ctccctgcag ctgcacaact 49800
 ggctggacaa caggtgggag ctccctcccc tgccctctcc ggggtggccg cagtcaccag 49860
 ccaggagccc accctcactc ctccggcccc cgctggccta ggcggcttcc acagcccctc 49920
 agccacgcct gcaactgcgc gtccccgcag ctcccgccct gccaccgcct cctactgacc 49980
 cgcaccctct gcgcaggagc cgcgctgtgt tcctggagct cacgcgctac agcccggccg 50040
 tggggctgca cgcgcgcgtc acgtgcgcc tcgagttccc ggcggccggc cgcgccctgg 50100
 ccgccctcag cgtccgcccc tttgcgctgc gccgcctcag cgcgggcctc tcgctgcctc 50160
 tgctcacctc ggtacgcccg tccccggcca gaccccgccg ctcccaccgg cagcgtcccg 50220
 cccctcgcg gggccccgcc cggcagcgtc tcacccctcg cagcggccccg cccctcgcga 50280
 gcgtcccgcc ccctcgcagg gccccgcccc ggcagcgtcc cgcgccctcg tagggccccg 50340
 cccggcagc gtcccccccc ctgcaggggc cccgccccgg cagcgtccct cccgccctcc 50400
 tgaccgcgcc cccacaggt gtgcctgctg ctgttcgccc tgcaactcgc cgtggccgag 50460

0990496-0130
 T0E120-89670560

gcccgtaactt ggcacagggga agggcgctgg cgcgtgctgc ggctcggagc ctgggcgcgg 50520
 tggctgctgg tggcgctgac ggcgccacg gcaactggtac gcctcgccca gctgggtgcc 50580
 gctgaccgcc agtggacccg ttctgtgcgc ggccgcccgc gccgcttcac tagcttcgac 50640
 caggtggcgc agctgagctc cgcagcccgt ggcttggcgg cctcgctgct ctctctgctt 50700
 ttggtcaagg tgagggtggt gccggtgggc gcggggctgg gcgcacaccc cagggtgca 50760
 agcagacaga ttctctgtcc gcagggtgcc cagcagctac gcttcgtgcg ccagtgggtcc 50820
 gtctttggca agacattatg ccgagctctg ccagagctcc tgggggtcac cttgggcctg 50880
 gtggtgctcg gggtagccta cggccagctg gccatcctgg taggtgactg cgcggccggg 50940
 gagggcgtct tagctcagct cagctcagct gtacgcctc actggtgtcg ccttccccgc 51000
 agctcgtgtc ttctgtgtg gactccctct ggagcgtggc ccaggccctg ttggtgctgt 51060
 gccctgggac tgggctctct accctgtgtc ctgccgagtc ctggcacctg tcacccctgc 51120
 tgtgtgtggg gctctgggca ctgcggctgt ggggcgcctt acggctgggg gctgttattc 51180
 tccgctggcg ctaccacgcc ttgcgtggag agctgtaccg gccggcctgg gagccccagg 51240
 actacgagat ggtggagttg ttctgtgcga ggctgcgcct ctggatgggc ctcagcaagg 51300
 tcaaggaggt gggtagggc cagtgggggg gagagggaca cgcctggggc tctgcccagg 51360
 gtgcagccgg actgactgag cccctgtgcc gccccagtt ccgccacaaa gtccgctttg 51420
 aagggatgga gccgctgcc tctcgtcct ccaggggctc caaggtatcc ccggatgtgc 51480
 cccacccag cgtgggtcc gatgcctgc accctccac ctctccagc cagctggatg 51540
 ggctgagcgt gagcctgggc cggctgggga caaggtgtga gcctgagccc tcccgcctcc 51600
 aagccgtgtt cgaggccctg ctcaccagct ttgaccgact caaccaggcc acagaggacg 51660
 tctaccagct ggagcagcag ctgcacagcc tgcaaggccg caggagcagc cgggcgcccg 51720
 ccggatcttc ccgtggccca tccccgggc tgccggcagc actgcccagc cgccttgccc 51780
 gggccagtgc ggggtgtggac ctggccactg gccccagcag gacaccctt cgggccaaga 51840
 acaagggtcca cccagcagc acttagtct ccttcctggc gggggtgggc cgtggagtcg 51900
 gagtggacac cgtcagtat tactttctgc cgtgtcaag gccgagggcc aggcagaatg 51960
 gctgcacgta ggttccccag agagcaggca ggggcatctg tctgtctgtg ggcttcagca 52020
 ctttaaagag gctgtgtggc caaccaggac ccagggtccc ctccccagct cccttgggaa 52080
 ggacacagca gtattggacg gtttctagcc tctgagatgc taatttattt ccccgagtcc 52140
 tcagggtacag cgggctgtgc ccggccccac cccctgggca gatgtcccc actgctaagg 52200
 ctgctggctt cagggagggg tagcctgcac cgcgcacc ctgcccctaa gttattacct 52260
 ctccagttcc taccgtactc cctgcaccgt ctactgtgt gtctcgtgtc agtaatttat 52320

0904968-07101

atggtgttaa aatgtgtata tttttgtatg tcactatattt cactagggct gaggggcctg 52380
 cgcccagagc tggcctcccc caacacctgc tgcgcttggt aggtgtggtg gcgttatggc 52440
 agcccggctg ctgcttggtat gcgagcttgg ccttggggccg gtgctggggg cacagctgtc 52500
 tgccaggcac tctcatcacc ccagaggcct tgtcatcctc ccttgcccca ggccaggtag 52560
 caagagagca gcgcccaggc ctgctggcat caggtctggg caagtagcag gactaggcat 52620
 gtcagaggac cccagggtgg ttagaggaaa agactcctcc tgggggctgg ctcccagggt 52680
 ggaggaaggt gactgtgtgt gtgtgtgtgt gcgcgcgcgc acgcgcgagt gtgctgtatg 52740
 gcccaggcag cctcaaggcc ctcgagctg gctgtgcctg cttctgtgta ccacttctgt 52800
 gggcatggcc gcttctagag cctcgacacc cccccaaccc ccgcaccaag cagacaaagt 52860
 caataaaaga gctgtctgac tgcaatctgt gcctctatgt ctgtgcactg gggtcaggac 52920
 tttatttatt tcactgacag gcaataccgt ccaaggccag tgcaggaggg agggccccgg 52980
 cctcacacaa actcggtgaa gtctccacc gaggagatga ggcgcttcg ctggcccacc 53040
 tcatagccag gtgtgggctc ggctggagtc tgtgcagggg ctttgctatg ggacggaggg 53100
 tgcaccagag gtaggctggg gttggagtag gcggcttcct cgcagatctg aaggcagagg 53160
 cggcttgggc agtaagtctg ggaggcgtgg caaccgctct gccacacac ccgccccaca 53220
 gcttgggcag ccagcacacc ccgctgaggg agcccatat tccctaccg ctggcggagc 53280
 gcttgatgtg gcggagcggg caatccactt ggaggggtag atatcgggtg ggttggagcg 53340
 gctatgatgc acctgtgagg ccatctgggg acgtaggcag ggggtgagct cactatcagg 53400
 tggcacctgg gcctgtccca ccagctcacg cctggacca cccccactca catttgctg 53460
 cagggccatc tggcgggcca cgaagggcag gttgcggtca gacacgatct tggccacgct 53520
 gg 53522

<210> 2
 <211> 4303
 <212> PRT
 <213> Homo sapiens

<400> 2

Met Pro Pro Ala Ala Pro Ala Arg Leu Ala Leu Ala Leu Gly Leu Gly
 1 5 10 15
 Leu Trp Leu Gly Ala Leu Ala Gly Gly Pro Gly Arg Gly Cys Gly Pro
 20 25 30
 Cys Glu Pro Pro Cys Leu Cys Gly Pro Ala Pro Gly Ala Ala Cys Arg
 35 40 45
 Val Asn Cys Ser Gly Arg Gly Leu Arg Thr Leu Gly Pro Ala Leu Arg

0304050

50					55					60					
Ile 65	Pro	Ala	Asp	Ala	Thr 70	Glu	Leu	Asp	Val	Ser 75	His	Asn	Leu	Leu	Arg 80
Ala	Leu	Asp	Val	Gly 85	Leu	Leu	Ala	Asn	Leu 90	Ser	Ala	Leu	Ala	Glu 95	Leu
Asp	Ile	Ser	Asn 100	Asn	Lys	Ile	Ser	Thr 105	Leu	Glu	Glu	Gly	Ile 110	Phe	Ala
Asn	Leu	Phe 115	Asn	Leu	Ser	Glu	Ile 120	Asn	Leu	Ser	Gly	Asn 125	Pro	Phe	Glu
Cys 130	Asp	Cys	Gly	Leu	Ala	Trp 135	Leu	Pro	Gln	Trp	Ala 140	Glu	Glu	Gln	Gln
Val 145	Arg	Val	Val	Gln	Pro 150	Glu	Ala	Ala	Thr	Cys 155	Ala	Gly	Pro	Gly	Ser 160
Leu	Ala	Gly	Gln	Pro 165	Leu	Leu	Gly	Ile	Pro 170	Leu	Leu	Asp	Ser	Gly	Cys 175
Gly	Glu	Glu	Tyr 180	Val	Ala	Cys	Leu	Pro 185	Asp	Asn	Ser	Ser	Gly 190	Thr	Val
Ala	Ala	Val 195	Ser	Phe	Ser	Ala	Ala 200	His	Glu	Gly	Leu	Leu	Gln	Pro	Glu
Ala 210	Cys	Ser	Ala	Phe	Cys	Phe 215	Ser	Thr	Gly	Gln	Gly 220	Leu	Ala	Ala	Leu
Ser 225	Glu	Gln	Gly	Trp	Cys 230	Leu	Cys	Gly	Ala	Ala 235	Gln	Pro	Ser	Ser	Ala 240
Ser	Phe	Ala	Cys	Leu 245	Ser	Leu	Cys	Ser	Gly 250	Pro	Pro	Ala	Pro	Pro	Ala 255
Pro	Thr	Cys	Arg 260	Gly	Pro	Thr	Leu 265	Leu	Gln	His	Val	Phe	Pro 270	Ala	Ser
Pro	Gly	Ala 275	Thr	Leu	Val	Gly	Pro 280	His	Gly	Pro	Leu	Ala 285	Ser	Gly	Gln
Leu 290	Ala	Ala	Phe	His	Ile	Ala 295	Ala	Pro	Leu	Pro	Val 300	Thr	Asp	Thr	Arg
Trp 305	Asp	Phe	Gly	Asp	Gly 310	Ser	Ala	Glu	Val	Asp 315	Ala	Ala	Gly	Pro	Ala 320
Ala	Ser	His	Arg	Tyr 325	Val	Leu	Pro	Gly	Arg 330	Tyr	His	Val	Thr	Ala 335	Val
Leu	Ala	Leu	Gly 340	Ala	Gly	Ser	Ala	Leu	Leu 345	Gly	Thr	Asp	Val	Gln	Val
Glu	Ala	Ala 355	Pro	Ala	Ala	Leu	Glu 360	Leu	Val	Cys	Pro	Ser 365	Ser	Val	Gln
Ser 370	Asp	Glu	Ser	Leu	Asp	Leu 375	Ser	Ile	Gln	Asn	Arg 380	Gly	Gly	Ser	Gly

09904968-071304

Leu Glu Ala Ala Tyr Ser Ile Val Ala Leu Gly Glu Glu Pro Ala Arg
 385 390 395 400
 Ala Val His Pro Leu Cys Pro Ser Asp Thr Glu Ile Phe Pro Gly Asn
 405 410 415
 Gly His Cys Tyr Arg Leu Val Val Glu Lys Ala Ala Trp Leu Gln Ala
 420 425 430
 Gln Glu Gln Cys Gln Ala Trp Ala Gly Ala Ala Leu Ala Met Val Asp
 435 440 445
 Ser Pro Ala Val Gln Arg Phe Leu Val Ser Arg Val Thr Arg Ser Leu
 450 455 460
 Asp Val Trp Ile Gly Phe Ser Thr Val Gln Gly Val Glu Val Gly Pro
 465 470 475 480
 Ala Pro Gln Gly Glu Ala Phe Ser Leu Glu Ser Cys Gln Asn Trp Leu
 485 490 495
 Pro Gly Glu Pro His Pro Ala Thr Ala Glu His Cys Val Arg Leu Gly
 500 505 510
 Pro Thr Gly Trp Cys Asn Thr Asp Leu Cys Ser Ala Pro His Ser Tyr
 515 520 525
 Val Cys Glu Leu Gln Pro Gly Gly Pro Val Gln Asp Ala Glu Asn Leu
 530 535 540
 Leu Val Gly Ala Pro Ser Gly Asp Leu Gln Gly Pro Leu Thr Pro Leu
 545 550 555 560
 Ala Gln Gln Asp Gly Leu Ser Ala Pro His Glu Pro Val Glu Val Met
 565 570 575
 Val Phe Pro Gly Leu Arg Leu Ser Arg Glu Ala Phe Leu Thr Thr Ala
 580 585 590
 Glu Phe Gly Thr Gln Glu Leu Arg Arg Pro Ala Gln Leu Arg Leu Gln
 595 600 605
 Val Tyr Arg Leu Leu Ser Thr Ala Gly Thr Pro Glu Asn Gly Ser Glu
 610 615 620
 Pro Glu Ser Arg Ser Pro Asp Asn Arg Thr Gln Leu Ala Pro Ala Cys
 625 630 635 640
 Met Pro Gly Gly Arg Trp Cys Pro Gly Ala Asn Ile Cys Leu Pro Leu
 645 650 655
 Asp Ala Ser Cys His Pro Gln Ala Cys Ala Asn Gly Cys Thr Ser Gly
 660 665 670
 Pro Gly Leu Pro Gly Ala Pro Tyr Ala Leu Trp Arg Glu Phe Leu Phe
 675 680 685
 Ser Val Pro Ala Gly Pro Pro Ala Gln Tyr Ser Val Thr Leu His Gly
 690 695 700

09504968-071301

Gln Asp Val Leu Met Leu Pro Gly Asp Leu Val Gly Leu Gln His Asp
 705 710 715 720
 Ala Gly Pro Gly Ala Leu Leu His Cys Ser Pro Ala Pro Gly His Pro
 725 730 735
 Gly Pro Arg Ala Pro Tyr Leu Ser Ala Asn Ala Ser Ser Trp Leu Pro
 740 745 750
 His Leu Pro Ala Gln Leu Glu Gly Thr Trp Gly Cys Pro Ala Cys Ala
 755 760 765
 Leu Arg Leu Leu Ala Gln Arg Glu Gln Leu Thr Val Leu Leu Gly Leu
 770 775 780
 Arg Pro Asn Pro Gly Leu Arg Leu Pro Gly Arg Tyr Glu Val Arg Ala
 785 790 795 800
 Glu Val Gly Asn Gly Val Ser Arg His Asn Leu Ser Cys Ser Phe Asp
 805 810 815
 Val Val Ser Pro Val Ala Gly Leu Arg Val Ile Tyr Pro Ala Pro Arg
 820 825 830
 Asp Gly Arg Leu Tyr Val Pro Thr Asn Gly Ser Ala Leu Val Leu Gln
 835 840 845
 Val Asp Ser Gly Ala Asn Ala Thr Ala Thr Ala Arg Trp Pro Gly Gly
 850 855 860
 Ser Leu Ser Ala Arg Phe Glu Asn Val Cys Pro Ala Leu Val Ala Thr
 865 870 875 880
 Phe Val Pro Ala Cys Pro Trp Glu Thr Asn Asp Thr Leu Phe Ser Val
 885 890 895
 Val Ala Leu Pro Trp Leu Ser Glu Gly Glu His Val Val Asp Val Val
 900 905 910
 Val Glu Asn Ser Ala Ser Arg Ala Asn Leu Ser Leu Arg Val Thr Ala
 915 920 925
 Glu Glu Pro Ile Cys Gly Leu Arg Ala Thr Pro Ser Pro Glu Ala Arg
 930 935 940
 Val Leu Gln Gly Val Leu Val Arg Tyr Ser Pro Val Val Glu Ala Gly
 945 950 955 960
 Ser Asp Met Val Phe Arg Trp Thr Ile Asn Asp Lys Gln Ser Leu Thr
 965 970 975
 Phe Gln Asn Val Val Phe Asn Val Ile Tyr Gln Ser Ala Ala Val Phe
 980 985 990
 Lys Leu Ser Leu Thr Ala Ser Asn His Val Ser Asn Val Thr Val Asn
 995 1000 1005
 Tyr Asn Val Thr Val Glu Arg Met Asn Arg Met Gln Gly Leu Gln
 1010 1015 1020
 Val Ser Thr Val Pro Ala Val Leu Ser Pro Asn Ala Thr Leu Ala

090498
 090499
 090500
 090501
 090502
 090503
 090504
 090505
 090506
 090507
 090508
 090509
 090510
 090511
 090512
 090513
 090514
 090515
 090516
 090517
 090518
 090519
 090520
 090521
 090522
 090523
 090524
 090525
 090526
 090527
 090528
 090529
 090530
 090531
 090532
 090533
 090534
 090535
 090536
 090537
 090538
 090539
 090540
 090541
 090542
 090543
 090544
 090545
 090546
 090547
 090548
 090549
 090550
 090551
 090552
 090553
 090554
 090555
 090556
 090557
 090558
 090559
 090560
 090561
 090562
 090563
 090564
 090565
 090566
 090567
 090568
 090569
 090570
 090571
 090572
 090573
 090574
 090575
 090576
 090577
 090578
 090579
 090580
 090581
 090582
 090583
 090584
 090585
 090586
 090587
 090588
 090589
 090590
 090591
 090592
 090593
 090594
 090595
 090596
 090597
 090598
 090599
 090600

1025		1030		1035
Leu Thr Ala Gly Val Leu Val Asp Ser Ala Val Glu Val Ala Phe				
1040		1045		1050
Leu Trp Thr Phe Gly Asp Gly Glu Gln Ala Leu His Gln Phe Gln				
1055		1060		1065
Pro Pro Tyr Asn Glu Ser Phe Pro Val Pro Asp Pro Ser Val Ala				
1070		1075		1080
Gln Val Leu Val Glu His Asn Val Thr His Thr Tyr Ala Ala Pro				
1085		1090		1095
Gly Glu Tyr Leu Leu Thr Val Leu Ala Ser Asn Ala Phe Glu Asn				
1100		1105		1110
Leu Thr Gln Gln Val Pro Val Ser Val Arg Ala Ser Leu Pro Ser				
1115		1120		1125
Val Ala Val Gly Val Ser Asp Gly Val Leu Val Ala Gly Arg Pro				
1130		1135		1140
Val Thr Phe Tyr Pro His Pro Leu Pro Ser Pro Gly Gly Val Leu				
1145		1150		1155
Tyr Thr Trp Asp Phe Gly Asp Gly Ser Pro Val Leu Thr Gln Ser				
1160		1165		1170
Gln Pro Ala Ala Asn His Thr Tyr Ala Ser Arg Gly Thr Tyr His				
1175		1180		1185
Val Arg Leu Glu Val Asn Asn Thr Val Ser Gly Ala Ala Ala Gln				
1190		1195		1200
Ala Asp Val Arg Val Phe Glu Glu Leu Arg Gly Leu Ser Val Asp				
1205		1210		1215
Met Ser Leu Ala Val Glu Gln Gly Ala Pro Val Val Val Ser Ala				
1220		1225		1230
Ala Val Gln Thr Gly Asp Asn Ile Thr Trp Thr Phe Asp Met Gly				
1235		1240		1245
Asp Gly Thr Val Leu Ser Gly Pro Glu Ala Thr Val Glu His Val				
1250		1255		1260
Tyr Leu Arg Ala Gln Asn Cys Thr Val Thr Val Gly Ala Gly Ser				
1265		1270		1275
Pro Ala Gly His Leu Ala Arg Ser Leu His Val Leu Val Phe Val				
1280		1285		1290
Leu Glu Val Leu Arg Val Glu Pro Ala Ala Cys Ile Pro Thr Gln				
1295		1300		1305
Pro Asp Ala Arg Leu Thr Ala Tyr Val Thr Gly Asn Pro Ala His				
1310		1315		1320
Tyr Leu Phe Asp Trp Thr Phe Gly Asp Gly Ser Ser Asn Thr Thr				
1325		1330		1335

05940650
"0130" 2070

Val	Arg	Gly	Cys	Pro	Thr	Val	Thr	His	Asn	Phe	Thr	Arg	Ser	Gly
1340						1345					1350			
Thr	Phe	Pro	Leu	Ala	Leu	Val	Leu	Ser	Ser	Arg	Val	Asn	Arg	Ala
1355						1360					1365			
His	Tyr	Phe	Thr	Ser	Ile	Cys	Val	Glu	Pro	Glu	Val	Gly	Asn	Val
1370						1375					1380			
Thr	Leu	Gln	Pro	Glu	Arg	Gln	Phe	Val	Gln	Leu	Gly	Asp	Glu	Ala
1385						1390					1395			
Trp	Leu	Val	Ala	Cys	Ala	Trp	Pro	Pro	Phe	Pro	Tyr	Arg	Tyr	Thr
1400						1405					1410			
Trp	Asp	Phe	Gly	Thr	Glu	Glu	Ala	Ala	Pro	Thr	Arg	Ala	Arg	Gly
1415						1420					1425			
Pro	Glu	Val	Thr	Phe	Ile	Tyr	Arg	Asp	Pro	Gly	Ser	Tyr	Leu	Val
1430						1435					1440			
Thr	Val	Thr	Ala	Ser	Asn	Asn	Ile	Ser	Ala	Ala	Asn	Asp	Ser	Ala
1445						1450					1455			
Leu	Val	Glu	Val	Gln	Glu	Pro	Val	Leu	Val	Thr	Ser	Ile	Lys	Val
1460						1465					1470			
Asn	Gly	Ser	Leu	Gly	Leu	Glu	Leu	Gln	Gln	Pro	Tyr	Leu	Phe	Ser
1475						1480					1485			
Ala	Val	Gly	Arg	Gly	Arg	Pro	Ala	Ser	Tyr	Leu	Trp	Asp	Leu	Gly
1490						1495					1500			
Asp	Gly	Gly	Trp	Leu	Glu	Gly	Pro	Glu	Val	Thr	His	Ala	Tyr	Asn
1505						1510					1515			
Ser	Thr	Gly	Asp	Phe	Thr	Val	Arg	Val	Ala	Gly	Trp	Asn	Glu	Val
1520						1525					1530			
Ser	Arg	Ser	Glu	Ala	Trp	Leu	Asn	Val	Thr	Val	Lys	Arg	Arg	Val
1535						1540					1545			
Arg	Gly	Leu	Val	Val	Asn	Ala	Ser	Arg	Thr	Val	Val	Pro	Leu	Asn
1550						1555					1560			
Gly	Ser	Val	Ser	Phe	Ser	Thr	Ser	Leu	Glu	Ala	Gly	Ser	Asp	Val
1565						1570					1575			
Arg	Tyr	Ser	Trp	Val	Leu	Cys	Asp	Arg	Cys	Thr	Pro	Ile	Pro	Gly
1580						1585					1590			
Gly	Pro	Thr	Ile	Ser	Tyr	Thr	Phe	Arg	Ser	Val	Gly	Thr	Phe	Asn
1595						1600					1605			
Ile	Ile	Val	Thr	Ala	Glu	Asn	Glu	Val	Gly	Ser	Ala	Gln	Asp	Ser
1610						1615					1620			
Ile	Phe	Val	Tyr	Val	Leu	Gln	Leu	Ile	Glu	Gly	Leu	Gln	Val	Val
1625						1630					1635			

0960493-0740

Gly 1640	Gly 1640	Gly 1640	Arg 1640	Tyr 1640	Phe 1640	Pro 1645	Thr 1645	Asn 1645	His 1645	Thr 1645	Val 1650	Gln 1650	Leu 1650	Gln 1650
Ala 1655	Val 1655	Val 1655	Arg 1655	Asp 1655	Gly 1655	Thr 1660	Asn 1660	Val 1660	Ser 1660	Tyr 1660	Ser 1665	Trp 1665	Thr 1665	Ala 1665
Trp 1670	Arg 1670	Asp 1670	Arg 1670	Gly 1670	Pro 1670	Ala 1675	Leu 1675	Ala 1675	Gly 1675	Ser 1675	Gly 1680	Lys 1680	Gly 1680	Phe 1680
Ser 1685	Leu 1685	Thr 1685	Val 1685	Leu 1685	Glu 1685	Ala 1690	Gly 1690	Thr 1690	Tyr 1690	His 1690	Val 1695	Gln 1695	Leu 1695	Arg 1695
Ala 1700	Thr 1700	Asn 1700	Met 1700	Leu 1700	Gly 1700	Ser 1705	Ala 1705	Trp 1705	Ala 1705	Asp 1705	Cys 1710	Thr 1710	Met 1710	Asp 1710
Phe 1715	Val 1715	Glu 1715	Pro 1715	Val 1715	Gly 1715	Trp 1720	Leu 1720	Met 1720	Val 1720	Ala 1720	Ala 1725	Ser 1725	Pro 1725	Asn 1725
Pro 1730	Ala 1730	Ala 1730	Val 1730	Asn 1730	Thr 1730	Ser 1735	Val 1735	Thr 1735	Leu 1735	Ser 1735	Ala 1740	Glu 1740	Leu 1740	Ala 1740
Gly 1745	Gly 1745	Ser 1745	Gly 1745	Val 1745	Val 1745	Tyr 1750	Thr 1750	Trp 1750	Ser 1750	Leu 1750	Glu 1755	Glu 1755	Gly 1755	Leu 1755
Ser 1760	Trp 1760	Glu 1760	Thr 1760	Ser 1760	Glu 1760	Pro 1765	Phe 1765	Thr 1765	Thr 1765	His 1765	Ser 1770	Phe 1770	Pro 1770	Thr 1770
Pro 1775	Gly 1775	Leu 1775	His 1775	Leu 1775	Val 1775	Thr 1780	Met 1780	Thr 1780	Ala 1780	Gly 1780	Asn 1785	Pro 1785	Leu 1785	Gly 1785
Ser 1790	Ala 1790	Asn 1790	Ala 1790	Thr 1790	Val 1790	Glu 1795	Val 1795	Asp 1795	Val 1795	Gln 1795	Val 1800	Pro 1800	Val 1800	Ser 1800
Gly 1805	Leu 1805	Ser 1805	Ile 1805	Arg 1805	Ala 1805	Ser 1810	Glu 1810	Pro 1810	Gly 1810	Gly 1810	Ser 1815	Phe 1815	Val 1815	Ala 1815
Ala 1820	Gly 1820	Ser 1820	Ser 1820	Val 1820	Pro 1820	Phe 1825	Trp 1825	Gly 1825	Gln 1825	Leu 1825	Ala 1830	Thr 1830	Gly 1830	Thr 1830
Asn 1835	Val 1835	Ser 1835	Trp 1835	Cys 1835	Trp 1835	Ala 1840	Val 1840	Pro 1840	Gly 1840	Gly 1840	Ser 1845	Ser 1845	Lys 1845	Arg 1845
Gly 1850	Pro 1850	His 1850	Val 1850	Thr 1850	Met 1850	Val 1855	Phe 1855	Pro 1855	Asp 1855	Ala 1855	Gly 1860	Thr 1860	Phe 1860	Ser 1860
Ile 1865	Arg 1865	Leu 1865	Asn 1865	Ala 1865	Ser 1865	Asn 1870	Ala 1870	Val 1870	Ser 1870	Trp 1870	Val 1875	Ser 1875	Ala 1875	Thr 1875
Tyr 1880	Asn 1880	Leu 1880	Thr 1880	Ala 1880	Glu 1880	Glu 1885	Pro 1885	Ile 1885	Val 1885	Gly 1885	Leu 1890	Val 1890	Leu 1890	Trp 1890
Ala 1895	Ser 1895	Ser 1895	Lys 1895	Val 1895	Val 1895	Ala 1900	Pro 1900	Gly 1900	Gln 1900	Leu 1900	Val 1905	His 1905	Phe 1905	Gln 1905
Ile 1910	Leu 1910	Leu 1910	Ala 1910	Ala 1910	Gly 1910	Ser 1915	Ala 1915	Val 1915	Thr 1915	Phe 1915	Arg 1920	Leu 1920	Gln 1920	Val 1920
Gly 1925	Gly 1925	Ala 1925	Asn 1925	Pro 1925	Glu 1925	Val 1930	Leu 1930	Pro 1930	Gly 1930	Pro 1930	Arg 1935	Phe 1935	Ser 1935	His 1935
Ser 1940	Phe 1940	Pro 1940	Arg 1940	Val 1940	Gly 1940	Asp 1940	His 1940	Val 1940	Val 1940	Ser 1940	Val 1940	Arg 1940	Gly 1940	Lys 1940

1940					1945					1950				
Asn	His	Val	Ser	Trp	Ala	Gln	Ala	Gln	Val	Arg	Ile	Val	Val	Leu
1955						1960					1965			
Glu	Ala	Val	Ser	Gly	Leu	Gln	Val	Pro	Asn	Cys	Cys	Glu	Pro	Gly
1970						1975					1980			
Ile	Ala	Thr	Gly	Thr	Glu	Arg	Asn	Phe	Thr	Ala	Arg	Val	Gln	Arg
1985						1990					1995			
Gly	Ser	Arg	Val	Ala	Tyr	Ala	Trp	Tyr	Phe	Ser	Leu	Gln	Lys	Val
2000						2005					2010			
Gln	Gly	Asp	Ser	Leu	Val	Ile	Leu	Ser	Gly	Arg	Asp	Val	Thr	Tyr
2015						2020					2025			
Thr	Pro	Val	Ala	Ala	Gly	Leu	Leu	Glu	Ile	Gln	Val	Arg	Ala	Phe
2030						2035					2040			
Asn	Ala	Leu	Gly	Ser	Glu	Asn	Arg	Thr	Leu	Val	Leu	Glu	Val	Gln
2045						2050					2055			
Asp	Ala	Val	Gln	Tyr	Val	Ala	Leu	Gln	Ser	Gly	Pro	Cys	Phe	Thr
2060						2065					2070			
Asn	Arg	Ser	Ala	Gln	Phe	Glu	Ala	Ala	Thr	Ser	Pro	Ser	Pro	Arg
2075						2080					2085			
Arg	Val	Ala	Tyr	His	Trp	Asp	Phe	Gly	Asp	Gly	Ser	Pro	Gly	Gln
2090						2095					2100			
Asp	Thr	Asp	Glu	Pro	Arg	Ala	Glu	His	Ser	Tyr	Leu	Arg	Pro	Gly
2105						2110					2115			
Asp	Tyr	Arg	Val	Gln	Val	Asn	Ala	Ser	Asn	Leu	Val	Ser	Phe	Phe
2120						2125					2130			
Val	Ala	Gln	Ala	Thr	Val	Thr	Val	Gln	Val	Leu	Ala	Cys	Arg	Glu
2135						2140					2145			
Pro	Glu	Val	Asp	Val	Val	Leu	Pro	Leu	Gln	Val	Leu	Met	Arg	Arg
2150						2155					2160			
Ser	Gln	Arg	Asn	Tyr	Leu	Glu	Ala	His	Val	Asp	Leu	Arg	Asp	Cys
2165						2170					2175			
Val	Thr	Tyr	Gln	Thr	Glu	Tyr	Arg	Trp	Glu	Val	Tyr	Arg	Thr	Ala
2180						2185					2190			
Ser	Cys	Gln	Arg	Pro	Gly	Arg	Pro	Ala	Arg	Val	Ala	Leu	Pro	Gly
2195						2200					2205			
Val	Asp	Val	Ser	Arg	Pro	Arg	Leu	Val	Leu	Pro	Arg	Leu	Ala	Leu
2210						2215					2220			
Pro	Val	Gly	His	Tyr	Cys	Phe	Val	Phe	Val	Val	Ser	Phe	Gly	Asp
2225						2230					2235			
Thr	Pro	Leu	Thr	Gln	Ser	Ile	Gln	Ala	Asn	Val	Thr	Val	Ala	Pro
2240						2245					2250			

0990496-0740

Glu	Arg	Leu	Val	Pro	Ile	Ile	Glu	Gly	Gly	Ser	Tyr	Arg	Val	Trp
2255						2260					2265			
Ser	Asp	Thr	Arg	Asp	Leu	Val	Leu	Asp	Gly	Ser	Glu	Ser	Tyr	Asp
2270						2275					2280			
Pro	Asn	Leu	Glu	Asp	Gly	Asp	Gln	Thr	Pro	Leu	Ser	Phe	His	Trp
2285						2290					2295			
Ala	Cys	Val	Ala	Ser	Thr	Gln	Arg	Glu	Ala	Gly	Gly	Cys	Ala	Leu
2300						2305					2310			
Asn	Phe	Gly	Pro	Arg	Gly	Ser	Ser	Thr	Val	Thr	Ile	Pro	Arg	Glu
2315						2320					2325			
Arg	Leu	Ala	Ala	Gly	Val	Glu	Tyr	Thr	Phe	Ser	Leu	Thr	Val	Trp
2330						2335					2340			
Lys	Ala	Gly	Arg	Lys	Glu	Glu	Ala	Thr	Asn	Gln	Thr	Val	Leu	Ile
2345						2350					2355			
Arg	Ser	Gly	Arg	Val	Pro	Ile	Val	Ser	Leu	Glu	Cys	Val	Ser	Cys
2360						2365					2370			
Lys	Ala	Gln	Ala	Val	Tyr	Glu	Val	Ser	Arg	Ser	Ser	Tyr	Val	Tyr
2375						2380					2385			
Leu	Glu	Gly	Arg	Cys	Leu	Asn	Cys	Ser	Ser	Gly	Ser	Lys	Arg	Gly
2390						2395					2400			
Arg	Trp	Ala	Ala	Arg	Thr	Phe	Ser	Asn	Lys	Thr	Leu	Val	Leu	Asp
2405						2410					2415			
Glu	Thr	Thr	Thr	Ser	Thr	Gly	Ser	Ala	Gly	Met	Arg	Leu	Val	Leu
2420						2425					2430			
Arg	Arg	Gly	Val	Leu	Arg	Asp	Gly	Glu	Gly	Tyr	Thr	Phe	Thr	Leu
2435						2440					2445			
Thr	Val	Leu	Gly	Arg	Ser	Gly	Glu	Glu	Glu	Gly	Cys	Ala	Ser	Ile
2450						2455					2460			
Arg	Leu	Ser	Pro	Asn	Arg	Pro	Pro	Leu	Gly	Gly	Ser	Cys	Arg	Leu
2465						2470					2475			
Phe	Pro	Leu	Gly	Ala	Val	His	Ala	Leu	Thr	Thr	Lys	Val	His	Phe
2480						2485					2490			
Glu	Cys	Thr	Gly	Trp	His	Asp	Ala	Glu	Asp	Ala	Gly	Ala	Pro	Leu
2495						2500					2505			
Val	Tyr	Ala	Leu	Leu	Leu	Arg	Arg	Cys	Arg	Gln	Gly	His	Cys	Glu
2510						2515					2520			
Glu	Phe	Cys	Val	Tyr	Lys	Gly	Ser	Leu	Ser	Ser	Tyr	Gly	Ala	Val
2525						2530					2535			
Leu	Pro	Pro	Gly	Phe	Arg	Pro	His	Phe	Glu	Val	Gly	Leu	Ala	Val
2540						2545					2550			

09904968-071301

Val	Val	Gln	Asp	Gln	Leu	Gly	Ala	Ala	Val	Val	Ala	Leu	Asn	Arg
	2555					2560					2565			
Ser	Leu	Ala	Ile	Thr	Leu	Pro	Glu	Pro	Asn	Gly	Ser	Ala	Thr	Gly
	2570					2575					2580			
Leu	Thr	Val	Trp	Leu	His	Gly	Leu	Thr	Ala	Ser	Val	Leu	Pro	Gly
	2585					2590					2595			
Leu	Leu	Arg	Gln	Ala	Asp	Pro	Gln	His	Val	Ile	Glu	Tyr	Ser	Leu
	2600					2605					2610			
Ala	Leu	Val	Thr	Val	Leu	Asn	Glu	Tyr	Glu	Arg	Ala	Leu	Asp	Val
	2615					2620					2625			
Ala	Ala	Glu	Pro	Lys	His	Glu	Arg	Gln	His	Arg	Ala	Gln	Ile	Arg
	2630					2635					2640			
Lys	Asn	Ile	Thr	Glu	Thr	Leu	Val	Ser	Leu	Arg	Val	His	Thr	Val
	2645					2650					2655			
Asp	Asp	Ile	Gln	Gln	Ile	Ala	Ala	Ala	Leu	Ala	Gln	Cys	Met	Gly
	2660					2665					2670			
Pro	Ser	Arg	Glu	Leu	Val	Cys	Arg	Ser	Cys	Leu	Lys	Gln	Thr	Leu
	2675					2680					2685			
His	Lys	Leu	Glu	Ala	Met	Met	Leu	Ile	Leu	Gln	Ala	Glu	Thr	Thr
	2690					2695					2700			
Ala	Gly	Thr	Val	Thr	Pro	Thr	Ala	Ile	Gly	Asp	Ser	Ile	Leu	Asn
	2705					2710					2715			
Ile	Thr	Gly	Asp	Leu	Ile	His	Leu	Ala	Ser	Ser	Asp	Val	Arg	Ala
	2720					2725					2730			
Pro	Gln	Pro	Ser	Glu	Leu	Gly	Ala	Glu	Ser	Pro	Ser	Arg	Met	Val
	2735					2740					2745			
Ala	Ser	Gln	Ala	Tyr	Asn	Leu	Thr	Ser	Ala	Leu	Met	Arg	Ile	Leu
	2750					2755					2760			
Met	Arg	Ser	Arg	Val	Leu	Asn	Glu	Glu	Pro	Leu	Thr	Leu	Ala	Gly
	2765					2770					2775			
Glu	Glu	Ile	Val	Ala	Gln	Gly	Lys	Arg	Ser	Asp	Pro	Arg	Ser	Leu
	2780					2785					2790			
Leu	Cys	Tyr	Gly	Gly	Ala	Pro	Gly	Pro	Gly	Cys	His	Phe	Ser	Ile
	2795					2800					2805			
Pro	Glu	Ala	Phe	Ser	Gly	Ala	Leu	Ala	Asn	Leu	Ser	Asp	Val	Val
	2810					2815					2820			
Gln	Leu	Ile	Phe	Leu	Val	Asp	Ser	Asn	Pro	Phe	Pro	Phe	Gly	Tyr
	2825					2830					2835			
Ile	Ser	Asn	Tyr	Thr	Val	Ser	Thr	Lys	Val	Ala	Ser	Met	Ala	Phe
	2840					2845					2850			
Gln	Thr	Gln	Ala	Gly	Ala	Gln	Ile	Pro	Ile	Glu	Arg	Leu	Ala	Ser

2855	2860	2865
Glu Arg Ala Ile Thr Val 2870	Lys Val Pro Asn Asn 2875	Ser Asp Trp Ala 2880
Ala Arg Gly His Arg Ser 2885	Ser Ala Asn Ser Ala 2890	Asn Ser Val Val 2895
Val Gln Pro Gln Ala Ser 2900	Val Gly Ala Val Val 2905	Thr Leu Asp Ser 2910
Ser Asn Pro Ala Ala Gly 2915	Leu His Leu Gln Leu 2920	Asn Tyr Thr Leu 2925
Leu Asp Gly His Tyr Leu 2930	Ser Glu Glu Pro Glu 2935	Pro Tyr Leu Ala 2940
Val Tyr Leu His Ser Glu 2945	Pro Arg Pro Asn Glu 2950	His Asn Cys Ser 2955
Ala Ser Arg Arg Ile Arg 2960	Pro Glu Ser Leu Gln 2965	Gly Ala Asp His 2970
Arg Pro Tyr Thr Phe Phe 2975	Ile Ser Pro Gly Ser 2980	Arg Asp Pro Ala 2985
Gly Ser Tyr His Leu Asn 2990	Leu Ser Ser His Phe 2995	Arg Trp Ser Ala 3000
Leu Gln Val Ser Val Gly 3005	Leu Tyr Thr Ser Leu 3010	Cys Gln Tyr Phe 3015
Ser Glu Glu Asp Met Val 3020	Trp Arg Thr Glu Gly 3025	Leu Leu Pro Leu 3030
Glu Glu Thr Ser Pro Arg 3035	Gln Ala Val Cys Leu 3040	Thr Arg His Leu 3045
Thr Ala Phe Gly Ala Ser 3050	Leu Phe Val Pro Pro 3055	Ser His Val Arg 3060
Phe Val Phe Pro Glu Pro 3065	Thr Ala Asp Val Asn 3070	Tyr Ile Val Met 3075
Leu Thr Cys Ala Val Cys 3080	Leu Val Thr Tyr Met 3085	Val Met Ala Ala 3090
Ile Leu His Lys Leu Asp 3095	Gln Leu Asp Ala Ser 3100	Arg Gly Arg Ala 3105
Ile Pro Phe Cys Gly Gln 3110	Arg Gly Arg Phe Lys 3115	Tyr Glu Ile Leu 3120
Val Lys Thr Gly Trp Gly 3125	Arg Gly Ser Gly Thr 3130	Thr Ala His Val 3135
Gly Ile Met Leu Tyr Gly 3140	Val Asp Ser Arg Ser 3145	Gly His Arg His 3150
Leu Asp Gly Asp Arg Ala 3155	Phe His Arg Asn Ser 3160	Leu Asp Ile Phe 3165

09904968-07101

Arg	Ile	Ala	Thr	Pro	His	Ser	Leu	Gly	Ser	Val	Trp	Lys	Ile	Arg
3170						3175					3180			
Val	Trp	His	Asp	Asn	Lys	Gly	Leu	Ser	Pro	Ala	Trp	Phe	Leu	Gln
3185						3190					3195			
His	Val	Ile	Val	Arg	Asp	Leu	Gln	Thr	Ala	Arg	Ser	Ala	Phe	Phe
3200						3205					3210			
Leu	Val	Asn	Asp	Trp	Leu	Ser	Val	Glu	Thr	Glu	Ala	Asn	Gly	Gly
3215						3220					3225			
Leu	Val	Glu	Lys	Glu	Val	Leu	Ala	Ala	Ser	Asp	Ala	Ala	Leu	Leu
3230						3235					3240			
Arg	Phe	Arg	Arg	Leu	Leu	Val	Ala	Glu	Leu	Gln	Arg	Gly	Phe	Phe
3245						3250					3255			
Asp	Lys	His	Ile	Trp	Leu	Ser	Ile	Trp	Asp	Arg	Pro	Pro	Arg	Ser
3260						3265					3270			
Arg	Phe	Thr	Arg	Ile	Gln	Arg	Ala	Thr	Cys	Cys	Val	Leu	Leu	Ile
3275						3280					3285			
Cys	Leu	Phe	Leu	Gly	Ala	Asn	Ala	Val	Trp	Tyr	Gly	Ala	Val	Gly
3290						3295					3300			
Asp	Ser	Ala	Tyr	Ser	Thr	Gly	His	Val	Ser	Arg	Leu	Ser	Pro	Leu
3305						3310					3315			
Ser	Val	Asp	Thr	Val	Ala	Val	Gly	Leu	Val	Ser	Ser	Val	Val	Val
3320						3325					3330			
Tyr	Pro	Val	Tyr	Leu	Ala	Ile	Leu	Phe	Leu	Phe	Arg	Met	Ser	Arg
3335						3340					3345			
Ser	Lys	Val	Ala	Gly	Ser	Pro	Ser	Pro	Thr	Pro	Ala	Gly	Gln	Gln
3350						3355					3360			
Val	Leu	Asp	Ile	Asp	Ser	Cys	Leu	Asp	Ser	Ser	Val	Leu	Asp	Ser
3365						3370					3375			
Ser	Phe	Leu	Thr	Phe	Ser	Gly	Leu	His	Ala	Glu	Gln	Ala	Phe	Val
3380						3385					3390			
Gly	Gln	Met	Lys	Ser	Asp	Leu	Phe	Leu	Asp	Asp	Ser	Lys	Ser	Leu
3395						3400					3405			
Val	Cys	Trp	Pro	Ser	Gly	Glu	Gly	Thr	Leu	Ser	Trp	Pro	Asp	Leu
3410						3415					3420			
Leu	Ser	Asp	Pro	Ser	Ile	Val	Gly	Ser	Asn	Leu	Arg	Gln	Leu	Ala
3425						3430					3435			
Arg	Gly	Gln	Ala	Gly	His	Gly	Leu	Gly	Pro	Glu	Glu	Asp	Gly	Phe
3440						3445					3450			
Ser	Leu	Ala	Ser	Pro	Tyr	Ser	Pro	Ala	Lys	Ser	Phe	Ser	Ala	Ser
3455						3460					3465			

FOETZ 89640660

Asp	Glu	Asp	Leu	Ile	Gln	Gln	Val	Leu	Ala	Glu	Gly	Val	Ser	Ser
3470						3475					3480			
Pro	Ala	Pro	Thr	Gln	Asp	Thr	His	Met	Glu	Thr	Asp	Leu	Leu	Ser
3485						3490					3495			
Ser	Leu	Ser	Ser	Thr	Pro	Gly	Glu	Lys	Thr	Glu	Thr	Leu	Ala	Leu
3500						3505					3510			
Gln	Arg	Leu	Gly	Glu	Leu	Gly	Pro	Pro	Ser	Pro	Gly	Leu	Asn	Trp
3515						3520					3525			
Glu	Gln	Pro	Gln	Ala	Ala	Arg	Leu	Ser	Arg	Thr	Gly	Leu	Val	Glu
3530						3535					3540			
Gly	Leu	Arg	Lys	Arg	Leu	Leu	Pro	Ala	Trp	Cys	Ala	Ser	Leu	Ala
3545						3550					3555			
His	Gly	Leu	Ser	Leu	Leu	Leu	Val	Ala	Val	Ala	Val	Ala	Val	Ser
3560						3565					3570			
Gly	Trp	Val	Gly	Ala	Ser	Phe	Pro	Pro	Gly	Val	Ser	Val	Ala	Trp
3575						3580					3585			
Leu	Leu	Ser	Ser	Ser	Ala	Ser	Phe	Leu	Ala	Ser	Phe	Leu	Gly	Trp
3590						3595					3600			
Glu	Pro	Leu	Lys	Val	Leu	Leu	Glu	Ala	Leu	Tyr	Phe	Ser	Leu	Val
3605						3610					3615			
Ala	Lys	Arg	Leu	His	Pro	Asp	Glu	Asp	Asp	Thr	Leu	Val	Glu	Ser
3620						3625					3630			
Pro	Ala	Val	Thr	Pro	Val	Ser	Ala	Arg	Val	Pro	Arg	Val	Arg	Pro
3635						3640					3645			
Pro	His	Gly	Phe	Ala	Leu	Phe	Leu	Ala	Lys	Glu	Glu	Ala	Arg	Lys
3650						3655					3660			
Val	Lys	Arg	Leu	His	Gly	Met	Leu	Arg	Ser	Leu	Leu	Val	Tyr	Met
3665						3670					3675			
Leu	Phe	Leu	Leu	Val	Thr	Leu	Leu	Ala	Ser	Tyr	Gly	Asp	Ala	Ser
3680						3685					3690			
Cys	His	Gly	His	Ala	Tyr	Arg	Leu	Gln	Ser	Ala	Ile	Lys	Gln	Glu
3695						3700					3705			
Leu	His	Ser	Arg	Ala	Phe	Leu	Ala	Ile	Thr	Arg	Ser	Glu	Glu	Leu
3710						3715					3720			
Trp	Pro	Trp	Met	Ala	His	Val	Leu	Leu	Pro	Tyr	Val	His	Gly	Asn
3725						3730					3735			
Gln	Ser	Ser	Pro	Glu	Leu	Gly	Pro	Pro	Arg	Leu	Arg	Gln	Val	Arg
3740						3745					3750			
Leu	Gln	Glu	Ala	Leu	Tyr	Pro	Asp	Pro	Pro	Gly	Pro	Arg	Val	His
3755						3760					3765			
Thr	Cys	Ser	Ala	Ala	Gly	Gly	Phe	Ser	Thr	Ser	Asp	Tyr	Asp	Val

09504958-071304

3770		3775		3780
Gly Trp Glu Ser Pro His Asn Gly Ser Gly Thr Trp Ala Tyr Ser				
3785		3790		3795
Ala Pro Asp Leu Leu Gly Ala Trp Ser Trp Gly Ser Cys Ala Val				
3800		3805		3810
Tyr Asp Ser Gly Gly Tyr Val Gln Glu Leu Gly Leu Ser Leu Glu				
3815		3820		3825
Glu Ser Arg Asp Arg Leu Arg Phe Leu Gln Leu His Asn Trp Leu				
3830		3835		3840
Asp Asn Arg Ser Arg Ala Val Phe Leu Glu Leu Thr Arg Tyr Ser				
3845		3850		3855
Pro Ala Val Gly Leu His Ala Ala Val Thr Leu Arg Leu Glu Phe				
3860		3865		3870
Pro Ala Ala Gly Arg Ala Leu Ala Ala Leu Ser Val Arg Pro Phe				
3875		3880		3885
Ala Leu Arg Arg Leu Ser Ala Gly Leu Ser Leu Pro Leu Leu Thr				
3890		3895		3900
Ser Val Cys Leu Leu Leu Phe Ala Val His Phe Ala Val Ala Glu				
3905		3910		3915
Ala Arg Thr Trp His Arg Glu Gly Arg Trp Arg Val Leu Arg Leu				
3920		3925		3930
Gly Ala Trp Ala Arg Trp Leu Leu Val Ala Leu Thr Ala Ala Thr				
3935		3940		3945
Ala Leu Val Arg Leu Ala Gln Leu Gly Ala Ala Asp Arg Gln Trp				
3950		3955		3960
Thr Arg Phe Val Arg Gly Arg Pro Arg Arg Phe Thr Ser Phe Asp				
3965		3970		3975
Gln Val Ala His Val Ser Ser Ala Ala Arg Gly Leu Ala Ala Ser				
3980		3985		3990
Leu Leu Phe Leu Leu Leu Val Lys Ala Ala Gln His Val Arg Phe				
3995		4000		4005
Val Arg Gln Trp Ser Val Phe Gly Lys Thr Leu Cys Arg Ala Leu				
4010		4015		4020
Pro Glu Leu Leu Gly Val Thr Leu Gly Leu Val Val Leu Gly Val				
4025		4030		4035
Ala Tyr Ala Gln Leu Ala Ile Leu Leu Val Ser Ser Cys Val Asp				
4040		4045		4050
Ser Leu Trp Ser Val Ala Gln Ala Leu Leu Val Leu Cys Pro Gly				
4055		4060		4065
Thr Gly Leu Ser Thr Leu Cys Pro Ala Glu Ser Trp His Leu Ser				
4070		4075		4080

09049540650

Pro Leu Leu Cys Val Gly Leu Trp Ala Leu Arg Leu Trp Gly Ala
4085 4090 4095

Leu Arg Leu Gly Ala Val Ile Leu Arg Trp Arg Tyr His Ala Leu
4100 4105 4110

Arg Gly Glu Leu Tyr Arg Pro Ala Trp Glu Pro Gln Asp Tyr Glu
4115 4120 4125

Met Val Glu Leu Phe Leu Arg Arg Leu Arg Leu Trp Met Gly Leu
4130 4135 4140

Ser Lys Val Lys Glu Phe Arg His Lys Val Arg Phe Glu Gly Met
4145 4150 4155

Glu Pro Leu Pro Ser Arg Ser Ser Arg Gly Ser Lys Val Ser Pro
4160 4165 4170

Asp Val Pro Pro Pro Ser Ala Gly Ser Asp Ala Ser His Pro Ser
4175 4180 4185

Thr Ser Ser Ser Gln Leu Asp Gly Leu Ser Val Ser Leu Gly Arg
4190 4195 4200

Leu Gly Thr Arg Cys Glu Pro Glu Pro Ser Arg Leu Gln Ala Val
4205 4210 4215

Phe Glu Ala Leu Leu Thr Gln Phe Asp Arg Leu Asn Gln Ala Thr
4220 4225 4230

Glu Asp Val Tyr Gln Leu Glu Gln Gln Leu His Ser Leu Gln Gly
4235 4240 4245

Arg Arg Ser Ser Arg Ala Pro Ala Gly Ser Ser Arg Gly Pro Ser
4250 4255 4260

Pro Gly Leu Arg Pro Ala Leu Pro Ser Arg Leu Ala Arg Ala Ser
4265 4270 4275

Arg Gly Val Asp Leu Ala Thr Gly Pro Ser Arg Thr Pro Leu Arg
4280 4285 4290

Ala Lys Asn Lys Val His Pro Ser Ser Thr
4295 4300

<210> 3
<211> 29
<212> DNA
<213> Artificial sequence

<220>
<223> PCR primer BPF14

<400> 3
ccatccacct gctgtgtgac ctggtaa

<210> 4
<211> 26
<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer BPR9

<400> 4

ccacctcatc gcccttcct aagcat

26

<210> 5

<211> 31

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer BPF9

<400> 5

atTTTTTgag atggagcttc actcttgag g

31

<210> 6

<211> 20

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer BPR4

<400> 6

cgctcggcag gccctaacc

20

<210> 7

<211> 21

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer BPF12

<400> 7

ccgccccag gagcctagac g

21

<210> 8

<211> 27

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer BPR5

<400> 8

catcctgttc atccgctcca cggttac

27

<210> 9

<211> 20

<212> DNA

<213> Artificial sequence

FOR 20 23640560

<220>

<223> PCR primer F13

<400> 9

tggagggagg gacgccaatc

20

<210> 10

<211> 20

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer R27

<400> 10

gtcaacgtgg gcctccaagt

20

<210> 11

<211> 21

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer F26

<400> 11

agcgcaacta cttggaggcc c

21

<210> 12

<211> 28

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer R2

<400> 12

gcagggtgag caggtggggc catcctac

28

<210> 13

<211> 26

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer BPF15

<400> 13

gaggctgtgg ggggccagtc aagtgg

26

<210> 14

<211> 25

<212> DNA

<213> Artificial sequence

T0E120"89640560

<220>
 <223> PCR primer BPR12

<400> 14
 agggaggcag aggaaagggc cgaac

25

<210> 15
 <211> 24
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer BPF6

<400> 15
 ccccgctcctc cccgctcttt tgtc

24

<210> 16
 <211> 21
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer BPR6

<400> 16
 aagcgcaaaa gggctgcgctc g

21

<210> 17
 <211> 22
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer BPF13

<400> 17
 ggccctccct gccttctagg cg

22

<210> 18
 <211> 21
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer KG8R25

<400> 18
 gttgcagcca agcccatggt a

21

<210> 19
 <211> 19
 <212> DNA
 <213> Artificial sequence
 <220>
 <223> PCR primer 1F1

0904960
 89640660
 0904960
 89640660

<400> 19
ggtcgcgctg tggcgaagg

19

<210> 20
<211> 16
<212> DNA
<213> Artificial sequence

<220>
<223> PCR primer 1R1

<400> 20
cggcgggagg catcgt

16

<210> 21
<211> 16
<212> DNA
<213> Artificial sequence

<220>
<223> PCR primer 1F2

<400> 21
acggcggggc catgag

16

<210> 22
<211> 18
<212> DNA
<213> Artificial sequence

<220>
<223> PCR primer 1R2

<400> 22
gcgtcctggc ccgcgtcc

18

<210> 23
<211> 20
<212> DNA
<213> Artificial sequence

<220>
<223> PCR primer 2F

<400> 23
ttgggggatgc tggcaatgtg

20

<210> 24
<211> 20
<212> DNA
<213> Artificial sequence

<220>
<223> PCR primer 2R

039640650
T0E120 039640650

<400> 24
gggattcggc aaagctgatg

20

<210> 25
<211> 20
<212> DNA
<213> Artificial sequence

<220>
<223> PCR primer 3F

<400> 25
ccatcagctt tgccgaatcc

20

<210> 26
<211> 20
<212> DNA
<213> Artificial sequence

<220>
<223> PCR primer 3R

<400> 26
agggcagaag ggatattggg

20

<210> 27
<211> 20
<212> DNA
<213> Artificial sequence

<220>
<223> PCR primer 4F

<400> 27
agacccttcc caccagacct

20

<210> 28
<211> 19
<212> DNA
<213> Artificial sequence

<220>
<223> PCR primer 4R

<400> 28
tgagccctgc ccagtgtct

19

<210> 29
<211> 21
<212> DNA
<213> Artificial sequence

<220>
<223> PCR primer 5F1

<400> 29

090496.01301
T08T40"89640660

gagccaggag gagcagaacc c

21

<210> 30
 <211> 21
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer 5R1

<400> 30
 agagggacag gcaggcaaag g

21

<210> 31
 <211> 18
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer 5F2

<400> 31
 cccagccctc cagtgcct

18

<210> 32
 <211> 20
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer 5R2

<400> 32
 cccaggcagc acatagcgat

20

<210> 33
 <211> 18
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer 5F3

<400> 33
 ccgaggtgga tgccgctg

18

<210> 34
 <211> 21
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer 5R3

<400> 34
 gaaggggagt gggcagcaga c

21

0904968-071301

21

21

19

19

21

<210> 40
 <211> 21
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer 8R

<400> 40
 gcaggagggc aggttgtaga a 21

<210> 41
 <211> 20
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer 9F

<400> 41
 ggtaggggga gtctgggctt 20

<210> 42
 <211> 17
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer 9R

<400> 42
 gaggccaccc cgagtcc 17

<210> 43
 <211> 20
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer 10F

<400> 43
 gttgggcatc tctgacggtg 20

<210> 44
 <211> 20
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer 10R

<400> 44
 ggaaggtggc ctgaggagat 20

0990499-01301

<210> 45
 <211> 17
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer 11F2

<400> 45
 ggggtccacg ggccatg 17

<210> 46
 <211> 20
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer 11R2

<400> 46
 aagcccagca gcacggtgag 20

<210> 47
 <211> 17
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer 11midF

<400> 47
 gcttgcagcc acggaac 17

<210> 48
 <211> 20
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer 11midR

<400> 48
 gcagtgtac cactgagaac 20

<210> 49
 <211> 23
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer 11F1

<400> 49
 tgcccctggg agaccaacga tac 23

<210> 50

09904968-071301

<211> 22
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer 11R1

<400> 50
 ggctgctgcc ctcactggga ag 22

<210> 51
 <211> 18
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer 12F

<400> 51
 gaggcgacag gctaaggg 18

<210> 52
 <211> 20
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Primer for PCR

<400> 52
 aggtcaacgt gggcctccaa gtagt 25

<210> 53
 <211> 19
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Forward nested primer F32

<400> 53
 gccttgcgca gcttggact 19

<210> 54
 <211> 20
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Second specific primer 31R

<400> 54
 acagtgtctt gagtccaagc 20

<210> 55
 <211> 30

09504968-071304
 T0ET20"89640560

<212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer

<400> 55
 ctggtgacct acatgggtcat ggccgagatc

30

<210> 56
 <211> 30
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer

<400> 56
 gggtgtctat cccgtctacc tggccctcct

30

<210> 57
 <211> 25
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer

<400> 57
 gtccccagcc ccagcccacc tggcc

25

<210> 58
 <211> 7
 <212> PRT
 <213> Homo sapiens

<400> 58

Trp Asp Phe Gly Asp Gly Ser
 1 5

<210> 59
 <211> 4
 <212> PRT
 <213> Homo sapiens

<400> 59

His Leu Thr Ala
 1

<210> 60
 <211> 27
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer

FOR 40 39640560

27

<220>
<223> PCR primer 12R-2

19

<220>
<223> PCR primer 13F

20

<220>
<223> PCR primer 13R

19

<220>
<223> PCR primer 14F

18

<220>
<223> PCR primer 14R

20

```
<220>
<223> PCR primer 15F16
```

18

<220>
<223> PCR primer 15R16

21

<220>
<223> PCR primer 15F15

18

```
<220>
<223> PCR primer 15R15
```

18

```
<220>
<223> PCR primer 15F14
```

<400> 70

gcccccggtgg tggtcagc

18

<210> 71
 <211> 18
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer 15R14

<400> 71
 caggctgcgt ggggatgc

18

<210> 72
 <211> 18
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer 15F13

<400> 72
 ctggaggtgc tgcgcgtt

18

<210> 73
 <211> 18
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer 15R13

<400> 73
 ctggctccac gcagatgc

18

<210> 74
 <211> 18
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer 15F12

<400> 74
 cgtgaacagg gcgcatta

18

<210> 75
 <211> 21
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer 15R12

<400> 75
 gcagcagaga tgttgttgga c

21

TOCT20"39640660

```
<400> 80
gggctcgtcg tcaatgcaag 20
```

<210> 81
 <211> 20
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer 15R9

<400> 81
 caccacctgc agcccctcta

20

<210> 82
 <211> 20
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer 15F8

<400> 82
 ccgcccagga cagcatcttc

20

<210> 83
 <211> 18
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer 15R8

<400> 83
 cgctgcccag catgttgg

18

<210> 84
 <211> 19
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer 15F7

<400> 84
 cggcaaaggc ttctcgctc

19

<210> 85
 <211> 20
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer 15R7

<400> 85
 ccgggtgtgg ggaagctatg

20

096496-0430-39540660

<210> 86
 <211> 21
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer 15F6

<400> 86
 cgagccattt accacccata g

21

<210> 87
 <211> 19
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer 15R6

<400> 87
 gcccagcacc agtcacat

19

<210> 88
 <211> 19
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer 15F5

<400> 88
 ccacgggcac caatgtgag

19

<210> 89
 <211> 20
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer 15R5

<400> 89
 ggcagccagc aggatctgaa

20

<210> 90
 <211> 18
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer 15F4

<400> 90
 cagcagcaag gtggtggc

18

<210> 91

0990455-0101
 T04T/0"2954050

<211> 18
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer 15R4

<400> 91
 gcgtaggcga cccgagag

18

<210> 92
 <211> 21
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer 15F3

<400> 92
 acgggcactg agaggaactt c

21

<210> 93
 <211> 20
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer 15R3

<400> 93
 accagcgtgc ggttctcact

20

<210> 94
 <211> 19
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer 15F2

<400> 94
 gccgcgacgt cacctacac

19

<210> 95
 <211> 18
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer 15R2

<400> 95
 tcggccctgg gctcatct

18

<210> 96
 <211> 20

03904968-03904968

<212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer 15F1

<400> 96
 gtcgccaggg caggacacag 20

<210> 97
 <211> 21
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer 15F1-1

<400> 97
 acttggaggc ccacgttgac c 21

<210> 98
 <211> 19
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer 15R1-1

<400> 98
 tgatgggcac caggcgctc 19

<210> 99
 <211> 21
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer 15F1-2

<400> 99
 catccaggcc aatgtgacgg t 21

<210> 100
 <211> 21
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer 15R1-2

<400> 100
 cctggtggca agctgggtgt t 21

<210> 101
 <211> 20
 <212> DNA

0990496-07304

<220>

<223> PCR primer 18R

<400> 106

tcccgtgct cccccac

18

<210> 107

<211> 18

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer 19F

<400> 107

gatgccgtgg ggaccgtc

18

<210> 108

<211> 20

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer 19R

<400> 108

gtgagcaggt ggcagtctcg

20

<210> 109

<211> 21

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer 20F

<400> 109

ccacccctc tgctcgtagg t

21

<210> 110

<211> 19

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer 20R

<400> 110

ggtcccaagc acgcatgca

19

<210> 111

<211> 22

<212> DNA

<213> Artificial sequence

T06T40"89640560

<220>

<223> PCR primer 21F

<400> 111

tgccggcctc ctgcgctgct ga

22

<210> 112

<211> 28

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer TWR2-1

<400> 112

gtaggatggc cccacctgct caccctgc

28

<210> 113

<211> 20

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer R27'

<400> 113

aggtcaacgt gggcctccaa

20

0990498-0704
T03F20"39570560